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RISK AND RESILIENCE IN ADOLESCENCE AND YOUNG ADULTHOOD: A CROSS-SECTIONAL STUDY OF EDUCATIONALLY RESILIENT CHILDREN IN ST. LUCIA

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ABSTRACT

Children exposed to adverse social and family circumstances are known to be at risk of developmental delay and slow educational progress. However, a significant minority of such children avoid this outcome and achieve educational distinction. These children are said to be "resilient" to the risks to which they are subject.

This exploratory cross-sectional study uses both the quantitative and qualitative methods of research. It aims to find factors relating to educational resilience in the main sample of 126 adolescents and young adults from poor neighbourhoods in the Caribbean island of St. Lucia, who have experienced adverse circumstances and stresses known to carry a substantial risk of educational failure. They represent both educationally resilient children and non-resilient children from all levels of the school system. Forty of the most disadvantaged cases are divided into four sub-samples of ten, and are studied in more depth using in-depth interviews and case studies to help determine the factors contributing to educational resilience.

It is hypothesised that several factors potently mediate the debilitating effects of stressors for these high-risk children, and consequently have a bearing on educational resilience. These "protective factors" include early attachment, good home and family environment, parental interest in education, having a mentor, teacher effectiveness, intellectual ability, and internal locus of control.

The study finds that the protective factors predict educational success. However, the most powerful predictors are intellectual ability and internal locus of control. This was discovered by utilising an original "model of educational resilience" developed for this study. This model highlights the stress, risk and competence equation in educational resilience.

Using the findings from the qualitative and quantitative analyses, suggestions are made for prevention and intervention strategies to assist high-risk children from poor residential areas in becoming educationally resilient, and for areas of further research.

DEDICATION

To my son Rickard Byron Storme Joseph for his love and understanding during my two years of research work.

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I certify that this dissertation is my own independent work, and has not been presented previously for any other degree.

Signed ..A. Joseph Date...October, 1995 -

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TEXT BOUND INTO

THE SPINE

T LUCIA

1:125,000

REFERENCE

Settlement

Road

Track

Quarter Boundary

Swamp

Contours
Vertical interval 600 feet
2400
1800
1200

Heights in feet
3000 and above
2400-3000
1800-2400
1200-1800
600-1200
0-600

SCALE 1:125,000

Mile 1 ½ 0 1 2 3 4 5 Miles

Kilometre 1 ½ 0 1 2 3 4 5 6 7 8 Kilometres

61°00'W 60°55'W 14°05'N 14°00'N 13°55'N 13°50'N 13°45'N 61°05'W

SAINT LUCIA CHANNEL

ATLANTIC OCEAN

CARIBBEAN SEA

ARIBBEAN SEA

Puerto Rico
Virgin Is.
Anguilla
Barbuda
St Christopher
Nevis
Montserrat
Antigua
Guadeloupe
Dominica
Martinique
ST LUCIA
St Vincent
Barbados
The Grenadines
Grenada
Tobago
Bonaire
La Tortuga
Margarita
Trinidad
Venezuela

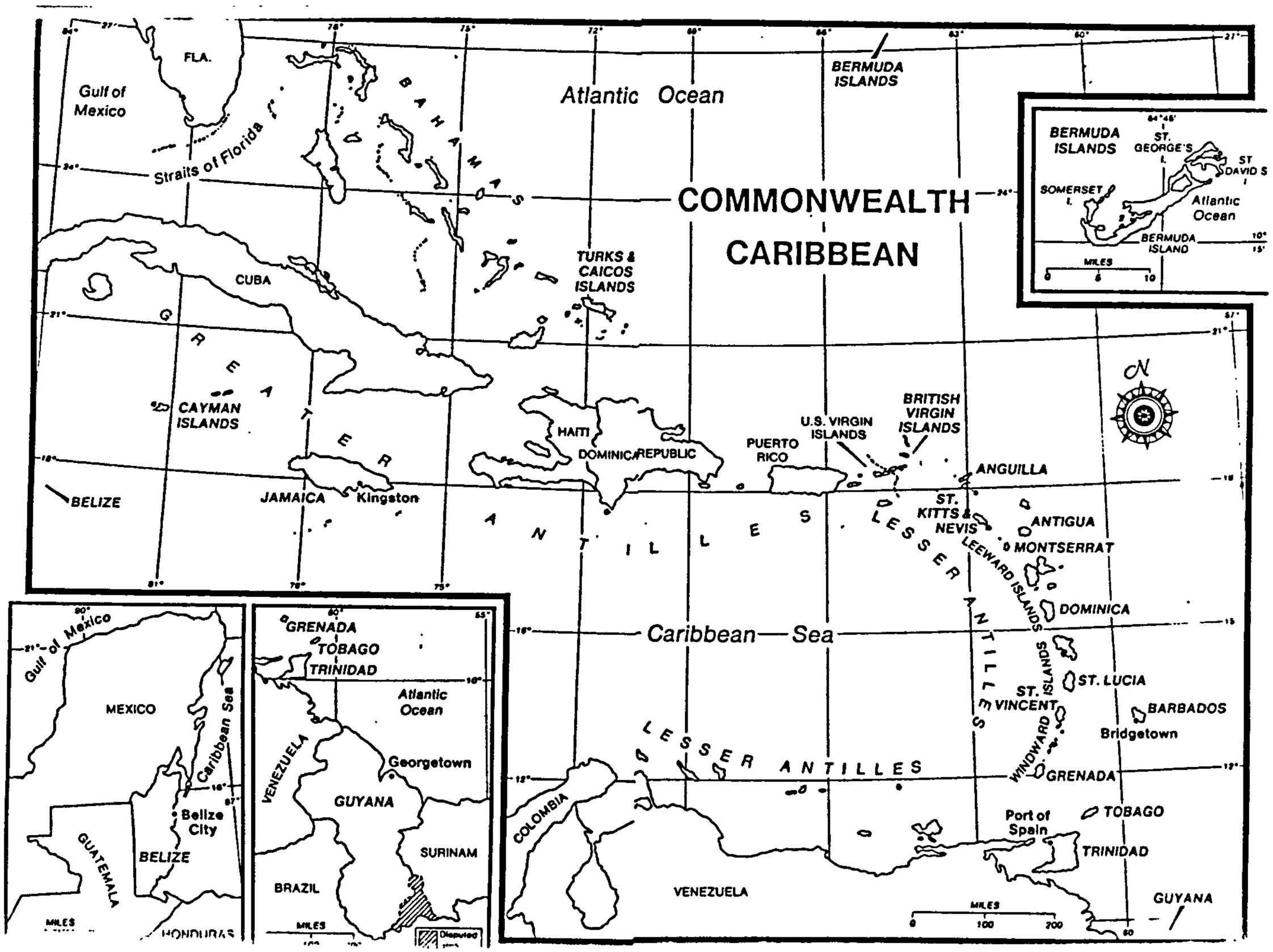
Pigeon Island (National Park)
Gros Islet
GROS ISLET
Rat Island
CASTRIES
DAUPHIN
CASTRIES
CASTRIES WATERWORKS RESERVE
ANSE LA RAYE
DENNERY
DENNERY WATERWORKS RESERVE
PRASLIN
SOUFRIERE
QUILESSE RESERVE
MICOUD
VIEUX FORT
LABORIE
Hewanorra International Airport
Vieux Fort
Maria Islands
Scorpion Island
Dennery Island
Rouche Island

D.O.S. 345 Edition 2

Published by the Government of the United Kingdom (Directorate of Overseas Surveys) for the Government of Saint Lucia.

Edition 2 derived from D.O.S. 345. Edn. 5. 1980 by Directorate of Overseas Surveys.
Published by Ordnance Survey for Government of St Lucia. 1988.

Copies of this map can be obtained from Lands and Survey Department, Castries, Saint Lucia or from Ordnance Survey, Romsey Road, Maybush, Southampton, SO9 4DH.


FLA.
Gulf of Mexico
Straits of Florida
BAHAMAS
Atlantic Ocean
BERMUDA ISLANDS
COMMONWEALTH CARIBBEAN
TURKS & CAICOS ISLANDS
CUBA
GREATER ANTILLES
CAYMAN ISLANDS
HAITI
DOMINICAN REPUBLIC
PUERTO RICO
U.S. VIRGIN ISLANDS
BRITISH VIRGIN ISLANDS
ANGUILLA
BELIZE
JAMAICA
Kingston
ST. KITTS & NEVIS
ANTIGUA
MONTSERRAT
LESSER ANTILLES
LEEWARD ISLANDS
DOMINICA
Caribbean Sea
WINDWARD ISLANDS
ST. LUCIA
ST. VINCENT
BARBADOS
Bridgetown
GRENADA
COLOMBIA
Port of Spain
TOBAGO
TRINIDAD
VENEZUELA
GUYANA
MILES
0 100 200
BERMUDA ISLANDS
ST. GEORGE'S I.
ST DAVID S I.
SOMERSET I.
Atlantic Ocean
BERMUDA ISLAND
MILES
0 5 10
N
Gulf of Mexico
MEXICO
Caribbean Sea
Belize City
BELIZE
GUATEMALA
HONDURAS
MILES
GRENADA
TOBAGO
TRINIDAD
Atlantic Ocean
VENEZUELA
Georgetown
GUYANA
SURINAM
BRAZIL
MILES
Disputed

CHAPTER I

INTRODUCTION: A STUDY OF EDUCATIONALLY RESILIENT CHILDREN

The people of today are what they are
because of the influences which
have made them so.
Bouldings (1960)

The Main Theme

Children who grow up in conditions of poverty, family stress and violence are at high risk of ill health, developmental delay and maladaptive behaviour. Intergenerational transmission of inadequate social functioning perpetuates the inequalities which characterise both traditional and industrial societies. However, not all children from families of poverty succumb to the adverse sequela to which they are at risk; such children are said to be "resilient". The study of such children and how they manage to survive despite early and prolonged hardship offers the opportunity to find strategies of intervention which may benefit other children in similar social circumstances.

Many disadvantaged children from poor backgrounds have achieved educational success despite being exposed to adverse circumstances. This "achievement against the odds" is also an indication of resilience. This study sets out to examine the lives of some of these children and their peers who have not been educationally successful, in an endeavour to identify the factors that contribute to this success or failure. The study takes place within the St. Lucian context (although references can be made to other Commonwealth Caribbean Countries), where it is very difficult for children of low socio-economic status to achieve educational success. As a consequence, children who are able to achieve this positive outcome demonstrate "educational resilience", and are thus labelled as "educationally resilient children".

The Research Question

The research question which the present study explored was "what factors in the lives of severely disadvantaged children in St. Lucia, reduced the risk of educational failure to which such circumstances predisposed them?" This question is especially

important because it will help to find ways of improving the life chances of socially deprived children, by optimizing intervention programmes relevant for the prevention of educational failure.

Hence, the main objectives of the study are as follows:

Objectives

1. To identify and investigate both resilient and non-resilient children from the poor neighbourhoods of St. Lucia who achieved or fail to achieve educational success, in order to determine the protective or vulnerability factors that interact to produce these outcomes.

2. To provide a cross-sectional perspective on children's capacity to cope with poverty, family instability and disharmonious family environment.

3. To use the findings to suggest guidelines for prevention and intervention programmes that will improve the educational standard of high-risk children vulnerable to educational failure.

Thus, this study focuses on both the vulnerability of adolescents and young adults, and the resilience of some in achieving educational success. In the two cohorts totalling 126 children, they all lived in poverty (although some were slightly better off than others with respect to quality of life), and were reared by parents with little education. Most of them lived in a disorganised family environment that hindered normal integration, while others were subjected to child abuse. Frequently, research has shown that several of these factors may interact and expose high-risk adolescents and young adults to cumulative stresses which are difficult to cope with, unless the necessary protective factors are present to mitigate the debilitating effects of these stressors. However, this present study has shown that despite being exposed to these high-risk factors, seventy children from the two cohorts are what Dr. Norman Garmezy (cited in Pines, 1984: 37) would describe as "*work well, play well, love well, and expect well*". This study is an account of my search for the roots of their educational resilience, for the factors that increased their coping capacity and developed their sources of strength.

The St. Lucian Context

Like all the other Commonwealth Caribbean territories St. Lucia's history is one of slavery, indentured labour, and colonialism. The structures within the economic, social and educational systems are, to a great extent legacies of their past. These structures exacerbate high levels of unemployment, persistent poverty, inequality of access to educational opportunities, and a deep feeling of inferiority among the Black masses, who demographically dominate the St. Lucian society. As a consequence, the children of these deprived lower class families, who live under such socio-economically disadvantaged conditions are at risk, among other things, of educational failure.

In St. Lucia today there are many at risk families who suffer from many deficiencies. They lack moral and physical support. They are emotionally distraught, poor and are burdened with numerous other problems typical of their low socio-economic status. The consequences of these are that the welfare of their children suffer and also place them at high-risk of behaviour problems and developmental delay.

Life for these poor families was a constant struggle and the only other respite for them was religion. Over 90% of St. Lucians are Catholic and the others belong to various denominational groups. Thus, Christianity, from colonial times, provided the hope that things will eventually work themselves out. Even when that failed, they still held on to their faith and religious beliefs. Religion was, and still is part and parcel of the everyday existence of most St. Lucians. Many turn to it for solutions to their problems, for peace, happiness, success, and salvation.

Evidence from previous research supports the view that family misfortunes can be transmitted from parents to their children, and showed that such problems can be persistent (Garmezy, 1987). But in spite of these vulnerabilities, the situation is not irreversible. Not all children from disadvantaged backgrounds become scarred for life. Indeed, there is ample evidence that many of these high-risk children avoid the incompetence typically associated with severe social adversity (Garmezy, 1985; 1991;

1993; Werner & Smith, 1982). Instead, these resilient children defy expectations and appear to achieve adequate or even superior behavioural adaptation in spite of serious stressors in their lives. A typical example of this resilience was demonstrated by some of the children who were part of the Kauai Study - an island in the Hawaiian chain, on which one of the earliest studies of resilience was carried out by Werner and Smith.

To date, no research on resilience has been conducted in St. Lucia, but many disadvantaged children from poor neighbourhoods have achieved educational resilience. Various personality factors, social milieu influences, and familial variables may have contributed to this positive outcome. But little is known about the influences and protective effects that stimulate educational success in these resilient children in families with limited social and economic resources. Even less is known about the personal characteristics of those who aspire to high academic attainment.

The Theoretical Approach

The researcher addresses the phenomenon of educational resilience among high risk children from poor neighbourhoods in St. Lucia, who came from all levels of the school system namely: primary, secondary, and post-secondary. This study was approached from an inclusive perspective, exploring individuals, family, school, and environmental factors that influence educational resilience. Although on the average, high-risk children scored lower on the national Common Entrance Examination (CEE) and the external Caribbean Examination Council (CXC) examinations than advantaged children, many disadvantaged children have succeeded with high scores and grades. However, the considerable numbers who do not succeed are not always low achievers, but fail to perform well at educational activities, and have poor school related behaviour as a consequence of the detrimental effects of the stressful circumstances which confront them.

The researcher centres her investigation on these two groups of children, exploring the number of risk factors and the level of stress that they are subjected to, and then

compare this with their academic achievement. This focus has been unrepresented in the considerable body of research on resilient children and educational achievement. It includes identifying familial, individual, and environmental factors related to promoting resilient behaviour in disadvantaged children evidenced by educational success. The contributions of these factors in explaining educational resilience are examined and measured by using a questionnaire, two in-depth interview schedules and two validated research instruments namely the Nowicki Strickland Locus of Control scale and the Raven's Standard Progressive Matrices.

The Plan of this Study

To understand resilience in high-risk St. Lucian children and why educational success was selected as the outcome of resilience in this St. Lucian context, it is extremely important that the historical circumstances that give rise to the present economic, social and educational structures are understood by looking into the past, specifically during the periods of slavery and colonialism. This will also bring to light an understanding of the concept of intergenerational continuity which is frequently mentioned in the resilience literature (Chapter II). An overview of the factors that facilitate educational achievement is also presented (Chapter III).

In recent years, researchers have produced a great deal of empirical work that focused on vulnerability and resilience. Thus, a progressive review of the resilience literature within the field of developmental psychopathology is presented. This includes the examination of the central constructs in resilience research, competing theoretical perspectives and models of resilience, and factors that moderate the effects of stressful life experience (Chapter IV).

A model of resilience is developed which shows the interrelationship between risk and stress factors that increased vulnerability on the one hand, and protective factors in the immediate environment and within the child that increased stress resistance and facilitated competence, on the other. An overview of the conceptual framework which briefly discussed the potential protective factors were presented (Chapter V).

The multiple methods used to identify vulnerability and protective factors, and procedures used to analyse them are discussed (Chapter VI).

The data obtained on children's low SES, their intellectual ability, and their locus of control (LOC) were analysed quantitatively to show differences and similarities between and among the four samples (Chapter VII). Subsequently, individual, familial and environmental factors were qualitatively explored using retrospective data on high-risk children from infancy to adolescence and young adulthood to determine their contribution to children's educational success. This analysis helped to distinguish high-risk educationally resilient children from peers of about the same age (12 - 18 years) who developed serious learning and behaviour problems in the primary and secondary education stages (Chapter VIII).

Four selected and illustrative case studies which typically represent two educationally resilient children and two others who experienced educational failure were presented as a follow-up to the qualitative analysis. There the two adolescents and two young adults tell their own life stories as they remember it (Chapter IX). Finally, the model of resilience used is reiterated, a resume of each hypothesis tested is briefly discussed, along with tentative conclusions drawn from the findings, the limitations and implications of the study. The findings are used to produce guidelines for prevention and intervention programmes, and suggestions for further research (Chapter X).

Throughout this study where discussions are used to illustrate the interrelationships between risk and stressful circumstances, and protective factors on the development of educationally resilient children, frequent references are made not only to the data obtained from the study's research instruments, but from the work of other resilience researchers as well. The methodology used is intended to present an effective balance between the statistical findings of this study which represent the tendencies of the two cohorts, and the qualitative findings from retrospective data that reflect the life history of individuals from the cohorts, their transition from one developmental period to the next, their coping capacity, and their ability to achieve educational success.

In the event that this study is replicated, a detailed Appendix is prepared. It consists of the copies of correspondence issued, the research instruments used, different tests used in the statistical analysis and their results, the LOC scale and the matrices used to test internality/externality and intellectual ability respectively. Also included are a summary of "observer's comments" on each individual in the four samples, and samples of coding sheets used for both lines of inquiry.

CHAPTER II

A HISTORICAL PERSPECTIVE: ST. LUCIA WITHIN THE CONTEXT OF THE COMMONWEALTH CARIBBEAN

For a full vision of the Caribbean area,
to live fully in it, the mind must be
able to stretch into the past
as well as the present.
Eric Murray, 1955: 68

Introduction

This is an attempt to link experiences in the past of other human beings with the likely consequences of our actions in the present; an attempt to seek a relationship between the past and present, a relationship which is frequently asserted and as frequently denied (Marshall, 1989). Hence, in an endeavour to understand the contemporary St. Lucian society with its socio-economic and educational structures and systems, and the disadvantaged conditions under which the majority of Black lower class children live and grow, it is imperative to understand the historical circumstances which underlie their manifestation. A St. Lucian society in which the majority of Blacks, after centuries of subjection and disdain, still belong to the lower class and live in different levels of poverty in well-identified areas in the urban and sub-urban areas of the city, towns and villages.

These low income families in these designated areas of poverty, encounter and have to cope with the numerous problems and deprivations endemic to their low socio-economic status (SES). Problems which include overcrowding, poor sanitary conditions, malnutrition, under- and unemployment, crime, drug and alcohol abuse, sexual and physical child abuse, teenage pregnancy, dysfunctional family units, high illegitimate births, class and job discrimination and inequality of access to educational opportunities. These problems are frequently associated with higher rates of social and emotional problems and anti-social behaviour which contribute to poor school adjustment (Mc Lloyd, 1990) and subsequently to limited coping skills for meeting the academic challenges at school (Taylor, 1991). These problems which are associated with lower class status, do not only exist in St. Lucia but in the other territories of the Commonwealth Caribbean as well. They are all structural forms that are direct legacies of the slave plantation system and colonialism.

Figueroa gave a generalised and comprehensive view of the Black poor when he stated that

> *the problems which are endemic to low income families are accentuated by the cultural apathy of a former slave population to the masters' impositions, by the uncertainties of the "lighter" population and by the relative absence in many places of stable family structures. (Figueroa, 1971:23)*

Thus, the history of St. Lucia is very similar to that of the other member states of the Commonwealth Caribbean and many Third World countries as well. It has been one of colonialism. But unlike most Third World countries, the history of the Commonwealth Caribbean has been one of slavery.

The Commonwealth Caribbean has been closely associated with the United Kingdom from which it inherited its social, spiritual and literary traditions, its economic policies, its educational practices, policies and traditions (Figueroa, 1971). As Figueroa points out, *"every society is a product of the particular historical forces that give it shape and form".*

This historical perspective does not attempt to provide a detailed and schematised historical blueprint of each of the territories within the Commonwealth Caribbean. Rather, it attempts to highlight the strong commonalities in their several shared characteristics, which include similarities in patterns of their social structure, economic development and educational system and structure which exist as consequences of their historical legacies. But most specifically, this historical perspective is intended to illuminate the development of the present educational system and family structure in St.Lucia. These legacies, Figueroa (1976) believes, provide the most important clues for an understanding of contemporary Commonwealth Caribbean society. As a consequence of these existing similarities in historical inheritance, notwithstanding the fact that there are also disparities in their historical background and diversities in their cultural inheritance, St. Lucia's contemporary society will be examined within the context of the Commonwealth Caribbean.

This historical background will commence in order of progression with a brief description of the Commonwealth Caribbean, the arrival of the Europeans, slavery and pre-emancipation, post-emancipation and East Indian bondage, colonialism and finally post-colonialism. The rationale being to examine the progressive developmental stages and circumstances from almost five centuries ago, which were instrumental in influencing the causality of the present social, economic and educational structures within the territories.

The Commonwealth Caribbean

The Commonwealth Caribbean, part of which is an archipelago, extends in the form of an arc 2,000 miles in length across the Caribbean Sea from Jamaica which is 665 miles from Belize and approximately 90 miles south of Cuba, to Trinidad in the south almost north-east of Venezuela in South America. Most of the territories form part of the Antilles chain which borders the Caribbean Sea with the exceptions of Guyana, Belize, Barbados, the Bahamas, the Turks and Caicos islands, and Bermuda. Of these, the Bahamas, Barbados, Bermuda and the Turks and Caicos Islands do not border the Caribbean Sea, but unlike Bermuda, they are within close proximity to the other territories.

Within the Commonwealth Caribbean, St. Lucia is located at Latitude 14 degrees and Longitude 61 degrees. It is 43 kilometres long and 22 kilometres wide, and it is to the east of the Caribbean Sea and between the French island of Martinique to the north, St. Vincent to the south and Barbados to the south-east.

The Commonwealth Caribbean was formerly known as the British West Indies because it had once been part of the British Empire and under the jurisdiction of Whitehall and Westminster at different periods between the 16th and 20th century. It consists of eighteen territories that are currently member states of the Commonwealth of Nations, an international organisation which also includes member states from the continents of Europe, Asia, North America, South America and Australia.

The Commonwealth Caribbean includes:

1. The independent countries of Antigua with its dependency Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada The Cooperative Republic of Guyana, Jamaica St. Kitts/Nevis, St. Lucia, St. Vincent and the Grenadines and the Republic of Trinidad and Tobago;

2. The British colonies of Anguilla, the British Virgin Islands, the Cayman Islands, Monsterrat and the Turks and Caicos Islands;

3. The internally self governing colony of Bermuda.

It is noteworthy that the Commonwealth Caribbean is not defined solely in geographical terms. Geographically, Belize is part of Central America, while Guyana is part of South America. However, their historical, cultural and commercial ties have always been with the islands of the Caribbean. Its total land area of 99.9 thousand square miles and a total population of approximately five million, is small in size in comparison to the other member states of the Commonwealth of Nations.

During the four and a half centuries since its discovery, five European nations namely, Spain, France, Portugal, Britain and Holland strived for its mastery, but Britain was the most successful and took control of the eighteen territories. With respect to St. Lucia, the early colonisers French and English fought many battles for its possession because it was perceived as a perfect strategic location from which to maintain regional control. The island changed hands fourteen times between the two nations, and each time the colonial power left its mark in the form of style of government, religion, system of education, culture, and names of places. The island was finally ceded to Britain by the Treaty of Paris in 1814.

Slavery and Pre-Emancipation

The territories experienced

> *Two centuries of slavery and three of class differentiation based on the plantation system ... have left us a legacy that cannot be wished away, nor exorcised by the pass of a wand, nor abolished by the stroke of a pen (Springer, 1965: 11).*

In the pre-colonial period the region was inhabited by the indigenous Amerindians, who came from the mainland of South America. With the arrival of the Europeans in the middle of the 15th century, they forcefully used the Amerindian in their quest for gold and colonization. In a comparatively short period of time, these indigenous Amerindian: the Tanala, Arawaks and Caribs in St. Lucia became extinct through the extremities of European enslavement.

The advent of sugar saw the establishment of the plantation system. This determined the racial mix of the population as well as the social structure that evolved. To maximise profits from the cultivation of sugar-cane, a large force was needed. This labour force came from the east, central and the coastal regions of Africa. These slaves were a mixture of people from tribal and cultural backgrounds, who did not share a common language. Crossing the Atlantic meant for them a cessation from their traditional type of societies. Their traditional customs, social organisation and behaviours could only survive as ideas and oral traditions, as there were in effect no mechanism in place within the slave plantations to perpetuate them.

The slaves were inducted to a drastically different way of life in unfamiliar surroundings with domineering people. During this period of adjustment, they underwent a period during which they were culturally emasculated and depersonalised; a process of acculturation, assimilation and socialisation in which they internalised new attitudes and a new identity imposed on them by the white planter class. It was a remarkable "Tour de force" (Henrique, 1985). They eventually devised a means of communication which was a modification of the language spoken

by their masters. In contemporary plantation societies, this modified version is the "Creole" language which is widely spoken by the masses in St. Lucia and also Dominica. It forms the basis of the first language of St. Lucians today although English is the official language. The slaves lived within compounds with some semblance of village character, in barracks or one room huts which were frequently overcrowded and insanitary, with meagre furnishings.

The plantation was the principal instrument used for European colonisation and exploitation of the territories. Typically, a plantation was operationalised as a unit of agricultural production with a specific type of economic organisation, characterised by a large evident labour force of unskilled workers, who are directed by a small supervisory staff (Beckford, 1976). It was also conceptualised as a total economic institution. Because it was omnipotent and omnipresent in the lives of those living within its confines, Beckford (1976) characterised the plantation society as a social institution.

Within this slave plantation system, the social structure and interpersonal relations vividly reflected the highly centralised, hierarchical and authoritarian structure which governed the pattern of economic and administrative organisation and decision making. The slaves were separated from the white planters and the managers and supervisors by social and cultural differences. Consequently there was in existence in all the territories, a rigid pattern of social and economic stratification based on a caste system, with the planters occupying the top of the social ladder and the slaves, the bottom. A system which was inadvertently instituted to make upward mobility practically impossible for the Black masses, and to ensure with absolute certainty, that they never rose above a certain level.

Education

During the slave period educational opportunities for the slaves were restricted. Illiteracy was almost universal among them; a feature which the planters endeavoured to maintain and preserve. They were of the view that educating the slaves would not

increase productivity level, but would put ideas of insurrection in their heads or cause them to contemplate alternatives to their present predicament.

Whatever occasional instruction the slaves received was in the form of catechism which was conducted by religious bodies. This, with its teachings of the equality of all men in the eyes of God was regarded as a dangerous doctrine by the planters who feared for their security if such ideas were wide spread and internalised by the slaves (Gordon, 1963). Gordon states that any attempts to keep the slaves illiterate was best seen in its connection with Christian proselytising. The planters as a group vehemently opposed the teaching of religion to their slaves, despite the missionaries' insistence that christianising them would make them better people. They feared that converting them would increase slave rebellions. However, a few allowed the missionaries to work among them on the plantations. Also, to increase productivity, a few of the slaves were trained in artisan skills.

The children of the whites and affluent coloureds were sent to England to receive instruction in classical education, and those who remained in the British West Indies used the best available means there were to become educated; usually through private tutoring. It is noteworthy that attempts by the planter class to deliberately keep the slaves ignorant and in mental darkness, and to deprive them even of the basic tools of learning was not entirely successful. For among the slaves were a few who became resilient and effectively utilised the very system of servitude and bondage to rise above their extremely disadvantaged circumstances, to become literate and achieve their masters' articulation. Although their circumstances persisted, yet after emancipation these resilient slaves became outstanding sophisticated individuals particularly the Mandingoes, and rose to the cultural level of their former masters.

Family Organisation

The most important effect of slavery is the weakness of the family and social organisation. There was no real security within the slaves compounds as they might be sold to another local planter or into the American colonies. This obviously

affected domestic behaviour since any union contracted was likely to be severed. In any event, slaves were not permitted to form permanent unions on either an African or a European model. Female concubinage was a common feature on the plantation societies among owners and their European employees. The cycle of concubinage became complete when the female children of such illicit and paramour unions became in turn the mistresses of Europeans.

These sexual practices of temporary relationships, promiscuity and concubinage had a profound and negative effect on the social and family structures in the societies. It was as a consequence of concubinage that a social class of coloureds originated; one which occupied the middle class position on the social hierarchy after emancipation and became quite influential. Today, in the Commonwealth Caribbean, the coloured-class grading system is very much in existence, and colour-class discrimination is very much in evidence within all sectors of the society: social, economic and educational.

Placed within the context of the slave environment child-rearing practices were negligible. The children were habitually neglected with very limited parental care, for parents had to work long hours in the fields. Usually the children were left in the care of an elderly woman (a family feature which clearly exists in contemporary Commonwealth Caribbean societies) who was too old to do the hard work on the plantations. But by the age of six the children too, were assigned tasks on the plantation.

Post-Emancipation

Social and Economic Structures

"A race has been freed, but a society has not been formed" (Lord Harris, Governor of Trinidad 1848). Emancipation, says Figueroa (1971), made a legal change but not a social change. Emancipation struck the bonds from the body, but Commonwealth Caribbean societies still bear the marks of a system whose dividing effects may be

seen in race feelings, in hidden antagonisms and resentments, in a perverted work standard that puts a *"premium on indolence and display, and despises manual industry"* (Sherlock, 1973: 10). The basic social structure of the British West Indian society did not change after emancipation although there was a weakening of the rigid class boundaries, a spread of the population, and a diversification of the economy from 1838 to 1938, and beyond; but the Whites continued to dominate and maintain economic power. Consequently, they remained at the top of the social pyramid and the ex-slaves remained at the bottom.

Although emancipation was conceived as a major radical constitutional change, it had no immediate social impact on the lives of the ex-slaves. For a very long time there was little disruption in the pre-emancipation life styles particularly in the islands occupying the portion of the Antilles chain. After three hundred years of slavery and subjection, the notion of being inferior had been so effectively indoctrinated into the negro slaves, that they resigned themselves to the acceptance of the lowest social position even long after emancipation. As recently as a generation ago, both the scale of wealth and job distribution inversely corresponded to the pigmentation of the skin; with the Blacks doing the hardest most unpleasant and lowest paid jobs (Blanchard 1947; Layne 1974). The ex-slaves were still deprived of economic and material benefits, but made no effort to attain them.

Once freed, The former slaves refused to make themselves available for work for wages under a regime operating similar to what existed in the pre-emancipation period. In a desperate effort to preserve the estates and to obtain cheap labour, the planters imported nearly half a million indentured labourers who were of East Indian descent to work on the plantations between 1834 and 1924. They too help to create a racial and cultural heritage.

For the first time, agricultural diversification was effected throughout the territories, and each one specialised in particular crops which still contribute greatly to their economies. But these economic changes did not bring about major change in the social structure of the societies. The employers remained a social class, and as such,

their values and interests constantly intervened in labour relations and thus complicated the employer-employee relationships.

The societies were stratified in classes. The White planters maintained their position and stood at the pinnacle of an ordered hierarchy. The Coloureds who came about as a result of concubinage during slavery and others who came in as traders fitted themselves in the middle. But even within this middle class, very sharp colour gradations were observed. The indentured labourers and Blacks occupied the bottom, lower class position. Mobility between the classes was possible but very limited. Besides, there were few avenues of escape from the lower class status. These were taken advantage of by a few resilient children of agricultural workers through hard work, determination and good fortune to become clerks in government offices and began the process of escape. But in such small communities as those of the Commonwealth Caribbean, it was, and still is difficult to conceal the real identity and status of your parents as this was and still is a major determinant of the status of the children. As time went on, social changes occurred gradually as Blacks, realising that the only means of escape was through the acquisition of land and education, aimed in that direction.

Educational Reforms

There was much educational activity in the colonies of the British west Indies in the century subsequent to emancipation, but to a great extent was unsuccessful. Principally this was attributable to inadequate provision for the masses, and the non existence of a comprehensive supposition of the intention of public education beyond the establishment of a limited personal status for a minority. However, primary education was made available to all Blacks for the first time as one of the conditions of the Emancipation Act. They were given the opportunity to acquire a basic education in the three R's, although initially the teachings were more bible-oriented. However the half caste were the ones who mostly benefited from these educational opportunities (Beckford, 1976).

Primary education in St. Lucia and the other colonies was funded by the Negro Education Grant and funds from the Lady Mico Charity, and was operationalised by denominational bodies. No provision was made for secondary education for the Blacks. However, the Negro Education Grant was terminated in 1845 but the educational process of the islands continued to expand with funds from the denominational groups, assisted by the colonial government. Consequently, religious denominations continued to be very influential in education as is evident in the dual control of education between Church and State.

At the attainment of emancipation in 1834, the predominantly Black race perceived education as an avenue for escape from the hard, unpleasant manual work on the plantations which became a social taboo (Layne, 1974). But the assimilation of what was being offered at school served further to acculturate Black people to the culture of the dominant class, and this served to further expand the ranks of the intermediate social group rather than to effect any significant change in the general social structure (Beckford,1976).

After the period 1870, a few individual Blacks, for the first time got an opportunity to attend secondary schools which were specifically grammar type oriented in the two pioneering countries of Barbados (1870) and Trinidad (1871). The other countries in the Commonwealth Caribbean were late in the commencement of secondary education. The first secondary school in St. Lucia, St. Joseph's Convent, was established by the missionaries in 1847. It is a highly selective and exclusively all female grammar school. The St. Mary's College, also highly selective and exclusively all male, was established by FMI Fathers in 1890.

These grammar schools were formally categorised into "1st grade" and "2nd grade" schools. The "better" children attended the 1st grade schools which had sixth forms which provided instruction up to the level of university entrance, and remained there until age 19 or 20. Government established a few island scholarships to enable the outstanding students in the 1st grade schools to study in overseas universities, usually in law and medicine. Although ideally Blacks had an opportunity to attend the top

grammar schools, practically, Black scholarship winners were often denied the opportunity to enter these schools on the premise that they were illegitimate (Gordon, 1965). This she observed was quite in evidence in Barbados and Jamaica where principals made it clear to education committees that the awards were really intended for middle class children. This laid the basis of the educational systems which exist throughout the region today (Layne, 1974). The schools he noticed, continued to function principally to produce a few whites and coloureds to study abroad to compete with the English colonials and professionals, while the Blacks who had no prospect of university education overseas, aspired to become clerks in the government offices and commercial services. The passport to respectable employment was the certificate issued by Cambridge Local Examinations after the successful completion of secondary education.

Another attempt at educational reform came during the 1950's when the Secondary Modern Schools, commonly known now as the Comprehensive Schools were established in a few of the territories. From the outset these schools were conceptually perceived as being inferior to the Grammar Schools. By 1960 Comprehensive Schools had only been established in Barbados, Trinidad and Tobago and Jamaica. The first one was established in St. Lucia in 1972 in the city of Castries with the help of the Canadian Government.

Post-Colonialism

Family Structures

Although the Blacks were legally free and could physically extricate themselves from the plantations, they were still unable to escape the firmly entrenched familial patterns of behaviour which they acquired from the system of slavery. Today, contemporary family structures in the St. Lucia (and the rest of the Commonwealth Caribbean) can be distinguished as a phenomenon principally influenced by slavery. During the slave period, the slaves were drawn from a wide area of Africa and from different types of family structures. This to some extent, could have influenced the region's

contemporary family structures. But undoubtedly, the dominant influence was that of slavery itself; because these diverse cultural and tribal groups were subjected to its manifestations and uniformity. Hence, this conglomeration of these different family structures in a society would be highly unlikely to produce the development of a specific family type. As described earlier, the circumstances under which they lived denied them the opportunity to perpetuate and procreate their ancestral family structure.

Hence, what exists throughout the Commonwealth Caribbean, particularly with the Blacks, is a family organisation which deviates from the ideal type Christian monogamy, to one which is predominantly common-law, serial monogamous, matrilineal and to a lesser extent patrilineal. The consequences of this type of family organisation are reflected in the illegitimacy figures for the Commonwealth Caribbean territories in the mid 20th century which was between 50%-70%. In St. Lucia in 1992, out of a total of 3,705 live births, 3,156 were illegitimate. This is indicative of the fact that in St. Lucia too several family groupings exist. They can be classified as:

1. The nuclear family, from which several characteristic features can be distinguished.

(a) The mother and father, who live with their children, are in a monogamous conjugal union, one which is the least common form of grouping and legally and socially sanctioned. The majority of these conjugal relationships can be found among the economically better-off members of the lower class who are extremely religious; a tradition of the peasants after emancipation. This family type exists to satisfy the needs of individuals members within the family, and to exemplify societal expectations. What occurs is that those who occupy the upper lower class tend to adopt the moral values and mannerisms of the middle class which is the antithesis of that of their own class.If the father feels tempted to seek sexual gratification outside of his home, his religion and respectability within his class will act as deterrents.

(b) The mother and father live in a common-law union, unmarried with their children. This form of union is still looked down upon by the church, but is tolerated by society, and is now recognised by law in the family legislature which gives equal rights to their illegitimate children. In this union, there is no deterrent for fathers to satisfy their sexual needs outside and producing "outside" children as a result. Hence,

(c) Faithful concubinage; the family type which is one feature of matrifocality. In many matriarchal families illegitimacy left many children without paternal support. Many children grow up with no knowledge of their father, a situation which existed during the slave period. Psychologically these children are placed at a disadvantage in comparison to their peers of monogamous unions and even common-law unions. Many fathers leave the home when the arrival of children increases their responsibilities and makes greater demands on their income. If the father of the sibling is known, he may or may not contribute toward child support. Very often fathers are brought before the court for child maintenance.

(d) The extended family, which evidently seems to be the most common family type. It usually includes two generations with a grandmother and/or grandfather with their children and grandchildren. In the absence of a grandfather the grandmother or sometimes another female relative usurps the function of the mother and sometimes that of the father. If the grandfather is in the home then he assumes the role of head and the grandmother assumes the role of mother to both her children and grandchildren. In many homes with young mothers, child-rearing is usually done by the grandmother.

Social and Economic Consequences of Family Structures

It is important at this point to note the living conditions of these families and how their behavioural norms are affected by them.

Professor Simey (cited in Sherlock, 1973) observes that profound feelings of inferiority "*stand out as the most powerful single factor in moulding the personality of the individual and in shaping the patterns of social intercourse*". He believes that

> *a society cannot be healthy in which so many people suffer from a constant regret that they are what they are, and do their best to give their children characteristics commonly supposed to be better than their own (Sherlock, 1973: 4).*

Although there are fixed categories within the family structure, yet they are essentially united by colour and poverty. The majority of people in the lower class are Black, and essentially poverty is the background of all low class families. Despite the fact that some families, particularly those of the upper lower class, may consider themselves better off economically and socially, yet poverty exists among all the family groupings in various levels of degree. In comparison with the middle and upper classes in such developed countries as Britain and the United States, it would be inconceivable and inappropriate to regard these better off families as "not being poor".

A product of low income is poor living conditions and the actual housing of the lower class is sufficient evidence of that. The urban poor live in ghettos or "shanty towns" which is a direct consequence of the urban drift from the rural areas from the period after emancipation. They were driven by their determination to sever their bondage to the soil and were hopeful of a better way of life in the towns and cities. They wanted to take advantage of the employment opportunities, better education and the health and social services which they offered; but this was not to be. They were trapped in the cities and towns. Too many of them are pursuing the too few jobs available.

This internal migration manifested persistent poverty and the problems associated with it. Outbreaks of violence and brutality which occur quite frequently are due to the cheek-by-jowl existence in overcrowded houses (Henriques, 1987). The disease rate was high with poor sanitary conditions which undoubtedly creates anxiety about the future. Street gangs developed and were quite prevalent in the islands of Barbados, Jamaica, Trinidad, Grenada and more recently in St. Lucia.

Economic Development

According to Boodhoo and Bakish (1981) the development of economic life is important because it affects the family and the state. The end of colonialism and the plantation economy heralded a new era of modern economy for the Commonwealth Caribbean. With the exceptions of the British colonies, they are no longer tied politically to a "Mother Country" and can now forge ahead to establish new links and seek new relationships with other countries.

In spite of the many impediments, the Commonwealth Caribbean has benefited from the colonial empire in certain respects. Its systems of trading and commerce, science and communications are among those acquisitions. Much of the trade of these ex-colonies are in the hands of multinational companies which are based in the developed countries of Europe and America, and small investors who take advantage of multitude of fiscal incentives offered by the various governments. They commence operations with their own expatriate management personnel, an indication of the educational systems inability to meet the critical shortages of professional, managerial and skilled technical workers. A conclusion can therefore be drawn that failure to produce an appropriately trained and educated population would constrain the adaptability of the Commonwealth Caribbean to structural changes in the world economy. A survey of Technical and Vocational Education and Training conducted by The Caribbean Community (CARICOM) in 1988 also stated that the success of the Region's efforts to achieve structural adjustment and transformation will depend upon the creation of appropriate skills and levels of aptitude. Unless this goal is achieved, the key and financially viable positions in industry, particularly manufacturing and

tourism will continue to be held by expatriates. Thus, efforts are being made in St. Lucia to universalise primary and secondary education, and to expand technical and vocational training in an endeavour to meet this requirement. The change from the plantation to modern economy brought about the evolution of technical and vocational education in the region. However, the positions in the public sectors which were once monopolised by the children of white planters and coloureds are now open to Blacks to use as an avenue to escape from the lower class.

Nevertheless, although slavery had been abolished about four generations ago, the basic structure of the plantation society remains very much what it was during slavery (Beckford, 1976). With the introduction of non-agricultural enterprises, the means of production were once again concentrated among kith and kin of the white planter class. The pattern of trade which was established during the colonial period is still very much in existence. Strategic decisions which affect the economies of the nations are made beyond their national boundaries by foreign multinational corporations. This is as a result of the integration of the American, British and Commonwealth Caribbean economies induced by trade, which has placed severe limitations on the territories decision making and innovations in planning new strategies for economic diversification. Put bluntly by Sherlock:

> *Historically, we in the Caribbean have grown accustomed to economic relations which have arisen both because of our geopolitical circumstances and our historical past. As a consequence, we tended always to see our economic development as a result and consequence of actions external to us. Perhaps this was inevitable because the external environment and the nature of our structural relations to metropolitan countries were the significant if not dominant factors in shaping our economic life. (Sherlock, 1973: 18)*

The Commonwealth Caribbean is still dependent on the metropolitan countries for economic survival, the consequences of which will determine the social life within its territories. This dependency model is not typical of the Commonwealth Caribbean but to other less developed countries in the world as well. All those nations have been grouped together in what is commonly known as the Third World countries.

Educational Reforms

The government of the Commonwealth Caribbean States assumed greater responsibility to provide education after the introduction of self-government and independence. A more realistic curriculum was introduced, which shifted *"educational content away from the imperialist ideology of former colonial powers, to the nationalist ideology and local and regional content"* (Miller, 1992). However, education is still considered to be alien to the people for whom it catered. The emphasis is now on the Business subjects, and technical/vocational education, hence the focus on Comprehensive schools.

To date there are four Comprehensive Secondary schools in St. Lucia. Those schools were introduced to provide secondary education for the children in the "all age primary schools", to combat the widespread obsession with sedentary white-collar employment, and to prepare students for employment in technical, vocational and commercial fields, and for jobs as teachers in primary schools (Layne, 1974). Ironically, the Black children who attended these schools visualised themselves as potential professionals, even though most of them ended up either unemployed or in the same low-paid occupations as their parents (Gordon, 1968).

What actually evolved in the territories is a secondary school system which continued to effectively segregate those who were better off economically and socially and who were predominantly fair-skinned from the Blacks who were poor. The Grammar Schools were mostly populated by the children of well to do families who believed grammar school education to be superior to Modern or Comprehensive Schools, which were mostly populated by the children of the lower class families. The new political leadership which emerged after colonialism and which was itself engendered by the colonial educational system is therefore confronted with the dilemma of the persistence of an inequitable social class structure and a dichotomous educational system which functions to preserve that structure and the status quo.

The economies of the territories are greatly moving towards industrialisation, principally manufacturing, tourism and agricultural diversification, and this has coexisted with governmental endeavours at educational modernisation. The emphasis is to universalise primary education and to make greater provision for the inclusion of more non-academic subjects in the secondary curriculum in a bid to equip students to cope in this technological world of work. Ironically, this idea of universal primary education originated in 1833 in the 5th resolution of the House of Commons Act to emancipate the slaves, and should have been in effect since 1834. Today, however, primary education is nearly universal in the Commonwealth Caribbean.

Over the last three decades, governments have substantially increased educational expenditures in all levels of the system in a determined effort to meet the demands for education. For instance, the budget allocation for primary education in St. Lucia in 1992/93 was $30,006,595, secondary education was $16,460,070, and tertiary education, $7,605,640 (Ministry of Education, 1994). There are eighty-four primary schools with a total population of 31,928, fourteen secondary schools with a population of 9,169 and one tertiary institution with an enrolment of 870 (Ministry of Education, 1994). The allocation of expenditures gives a clear indication of government's priorities. However, it is not surprising that expenditures for secondary and post-secondary education are growing at a faster rate than for primary education, because it is from these institutions that government expects to get the trained manpower which will be required in the government, industrial and commercial services.

The structure of Secondary Schooling

Secondary education is free only in schools which are owned and completely maintained by government. Most private schools receive financial assistance from government, but their management is in private hands, and in most territories, denominational hands. Guyana is the only exception; the entire educational system was nationalised in 1977. It is the belief that the existence of both private and government schools reinforces the social divisions which historically have plagued the

territories of the Commonwealth Caribbean.

Most of the countries introduced the Junior Secondary School system; one which was first established by Trinidad and Tobago in 1972. The primary purpose of the Junior Secondary programme was to provide secondary education to all primary school children of 11+. It was intended to be a three year programme Forms 1-3. At the end of the third year students wrote a Common Middle Examination to gain selection to the Grammar Schools and Senior Secondary Schools.

In St. Lucia in 1972, three Junior Secondary Schools were constructed with financial assistance from the Canadian Government. By 1987 there were six such schools. Today, government has upgraded all Junior Secondary Schools to full fledged five-form secondary schools with the intention of increasing the number of children who attain secondary education.

To gain admission into the Junior Secondary or five form Grammar and Comprehensive Schools, whatever the case may be in the different territories, (with the exception of St. Kitts/Nevis where secondary education is almost universal) students have to write the Common Entrance Examination (CEE) also commonly known as the 11+ exams, at the end of grade 7. It is the only testing instrument and the only practical method available to help select students for the limited number of secondary school places. This method of selection, in practicality, distorts governments' agenda for educational objectives, and will remain in effect until they can develop an educational system that can offer comparable educational opportunities at a post-primary level to everyone thereby eliminating the need for competitive selection for secondary schools (Fisher, 1979).

As a consequence of the selection process, a large number of children go through the school system without obtaining a secondary education. These remain in the all age primary schools until they attain the school leaving age of fifteen, when they write the national examination to receive the school leaving certificate. They then move into a society ill equipped to face the challenges which confront them, and join the

ranks of the under and unemployed. A few, in a valiant effort to attain some degree of qualification will seek admission to various private secondary schools.

The Comprehensive Secondary Schools offer a five year programme to students of 11+ to 17+. The conventional pattern of comprehensive secondary schooling which is found mainly in Barbados, Jamaica and the Eastern Caribbean, is one in which students, for the first three years follow a general education programme and then specialise in the technical, commercial or vocational stream depending on their aptitudes and interests. Others pursue academic studies in the natural sciences, social sciences and arts. At the end of the fifth year, all students write the Caribbean Examination Council (CXC) O'level examinations in the subjects opted for. Cognizance should be taken of the fact that the curriculum offered at the Comprehensive Schools is the same as that offered at the Grammar Schools.

In recent times, most Sixth Form secondary schools, which were mostly the old and prestigious privately owned Grammar Schools, have been taken over by governments and converted into five form secondary schools. A'level Colleges and Community Colleges are being constructed where students can pursue the two year A'level programme.

In an endeavour to bring about equity of education in St. Lucia, the government has brought the two prestigious older secondary schools, the St. Mary's College and St. Joseph's Convent under its legal jurisdiction. This paved the way for exceptionally bright children from disadvantaged backgrounds to gain admission. But these grammar schools continue to function essentially as they have done in the past because their school boards are determined to maintain their historically prestigious reputation by creating entry opportunities only for the "cream" of primary school students. So, despite the fact that poor Blacks now have an opportunity for entry, obviously this has been made extremely difficult to achieve as is evident in the selection process. They will have to excel in the Common Entrance Examination in order to gain admission. It is reasonable to assume that the children of parents in the middle and upper classes would obviously have the most disproportionately higher

chances of being assigned to the better secondary schools.

The Selection Process

When one closely examines the process of educational selection which begins formally at age 11+, it becomes clear that the educational system is unjust; maybe unavoidably so. All the territories, (with the exception of St. Kitts/Nevis), irrespective of their economic status have not been able to provide sufficient secondary school places for the large number of children writing the Common Entrance Examination annually. For instance, out of a total of 4867 children who wrote the Common Entrance Examination in St. Lucia in 1993, only 2025 were assigned to secondary schools. The results clearly indicate that male students are at a disadvantage at this level of education. **See Table 1 below.**

Table 1: SUMMARY OF EXAMINATION BY SEX

	MALE (%)	FEMALE (%)	TOTAL
No. Taking Exams	2469 (50.7)	2398 (49.3)	4867
No. Assigned	881 (43.5)	1144 (56.5)	2025
%	(35.7)	(47.7)	
No. scoring 100+	1052 (43.8)	1350 (56.8)	2402
%	(42.6)	(56.3)	

Source: Albertin, M. (1993). Common Entrance Examination: What can we learn from the results? St Lucia: Ministry of Education, Culture and Labour

The Shorey Commission in Barbados accurately reflects the manner in which the economically advantaged groups have accommodated themselves to the CEE while turning their backs on the system of public primary education. A situation which exists throughout the Commonwealth Caribbean:

> *It is evident that pupils whose parents can afford them special tuition at the primary school stage enjoy the best of all worlds. They opt out of the government system of primary education so as to pursue their preparatory education in institutions with smaller numbers in which more individual attention can be given and which, with a few notable*

exceptions appear to follow a more narrow restricted curriculum, geared specifically to securing "passes" at the CEE. The situation above accelerates the scholastic development of the privileged children and enhances the advantages they already possess in language development and so on. Consequently these children enjoy far greater likelihood of gaining success in the CEE which will be above the cut-off point and which will secure them admission to the "grammar schools". At this point, and as a result of their performance these pupils opt back into the national system of education. (Layne, 1974: 46).

In St. Lucia, the school which has maintained the highest percentage of passes over the years has been the Tapion Elementary School; a privately owned school to which a few well to do families send their children with the specific objective of getting them to the two older secondary schools. The school caters for the age group 3-12. The existence of such private schools in the Commonwealth Caribbean reflects to some extent the class based divisions which have been in existence for centuries and which the education systems should attempt to eradicate.

The selection-rejection process occurs again at the end of Form 5 at the secondary schools when the students sit the external General Certificate of Examination (GCE) and the local CXC examinations at O'level. Most students realise that skin colour is not the exclusive determinant for status; education and income also affect one's position in society. Hence, success at these exams means for them a passport to gainful employment or entry into tertiary education. Practically, the results have been dismal throughout the territories, and assuming there are available places at tertiary institutions, only a limited number of students can obtain the minimum six O'levels with CXC grades 1 and 2 or GCE grades A and B to secure a place there, albeit that the qualification requirements for admission vary by territory and course of study. (Note that tertiary education in the Commonwealth Caribbean does not include university education). Usually, the criteria for entry have to be revised in order to accommodate their quota. With employment within the private and public sectors close to saturation point, even those students who are not able to follow the A'level programme, but still manage to pass a few subjects have to join the ranks of the unemployed and under-employed. This creates a social problem for the governments of the territories as well as for the school leavers themselves and their families.

It is not surprising that in St Lucia the two most prestigious secondary schools obtain the best CXC examination results, and secure most of the available places at the Community College. Table 2 below shows the GCE/CXC 'O' Level combined results for all the secondary school for 1993/1994.

Table 2: Secondary Schools Examination Results: GCE/CXC (General) Combined Results Number of Subject Passes According To Schools 1993/1994

School	Number of Students Attaining											Total
	0 Ps	1 Ps	2 Ps	3 Ps	4 Ps	5 Ps	6 Ps	7 Ps	8 Ps	9 Ps	10 Ps	
Castries Comprehensive Secondary School	26	13	28	19	16	17	16	10	-	-	-	145
Choiseul Secondary School	28	15	11	10	12	8	3	3	-	-	-	90
Clendon Mason Memorial Secondary	17	15	12	13	11	9	4	-	-	-	-	81
Corinth Secondary School	19	10	20	14	19	15	6	3	1	-	-	107
Entrepot Secondary School	22	11	18	15	12	6	4	1	1	-	-	90
Leon Hess Comprehensive School	23	20	22	25	14	16	12	7	4	-	-	143
Micoud Secondary School	20	29	23	18	8	8	65	4	-	-	-	116
Soufriere Comprehensive School	13	14	13	12	10	13	18	3	4	-	-	87
St Joseph's Convent	-	-	2	5	8	19	14	32	52	5	1	142
St Mary's College	-	3	5	6	12	12	-	27	16	-	2	97
Vide Boutielle Secondary	47	21	18	4	3	-	11	-	-	-	-	93
Vieux Fort Comprehensive Secondary School	48	27	34	34	20	22		8	2	1	-	207
Total	263	178	206	175	145	145	99	98	80	6	3	1398

Source: Ministry of Education, Culture and Labour (1994). Statistical Digest 1993. St. Lucia.

Factors Affecting Examination Results

The poor performance of students on these internal and external examinations have been attributed to a number of factors. One is the quality of teachers at all levels of the system. In many of the territories the attrition rate is fairly high, and teachers leaving the profession have to be replaced by young, inexperienced and untrained secondary school graduates. The World Bank Country Study of the Caribbean Region, 1993, observed that the quality of secondary school teaching force varies considerably across the Caribbean ranging from the predominantly well qualified teachers in the larger territories to many poorly qualified ones in the smaller islands. The assumption is that even when textbooks are available, very often relatively low levels of literacy and numeracy among children or the population at large, impede teacher effectiveness.

Another factor is the inequitable economic situation which places the majority of students in the lower classes at a disadvantage. The circumstances of adverse socio-economic conditions which prevail within the home as a consequence of this inequity make it almost impossible for these disadvantaged children to attain educational success by performing creditably on these examinations. This may be due, in part, to inadequate parental support, lack of educational material and text-books, a home environment unconducive for learning, and children's disinterest in education.

The tertiary institutions are concentrated in the urban areas and as a result, the disadvantaged students from the rural areas who are fortunate enough to gain admission, have to meet the high costs of transportation in addition to textbooks and other educational paraphernalia. In St. Lucia, the majority of the students at that level of education are graduates of the older secondary schools located in the city of Castries.

The Structure of Examinations

The Common Entrance Examination (CEE)

Over the years the transfer to secondary schools has been traditionally based on the highly competitive selection procedure which is known throughout the Commonwealth Caribbean as the CEE with the exception of Guyana where it is known as the Secondary School Entrance Examination. These selection examinations are often referred to as the 11+ examinations because they are taken by grade 7 at age 11 or 12. There are variations in the structure and composition of the examinations from territory to territory, but generally speaking they all test mathematical skills, use of English and general knowledge.

The CEE was introduced in St. Lucia in 1977. Prior to 1983, it was a straight objective test in the areas of Mathematics, English, Social Studies and General Science. This structure exerted tremendous pressure on teachers particularly those in the capital city where the competition for the limited secondary school places was most intense. Teaching methods were devoid of creativity. The main emphasis was to teach to the test, ignoring other important skills in the process.

After significant public pressure on the government, they modified the structure of the CEE to include an essay and summary paper, and a problem solving paper. The examination is now composed of two parts. The first part includes the essay and summary paper, and Mathematics Problem solving. The second part consists of a General Paper which includes questions of Social Studies, General Science, and Study Skills; Mathematics (Multiple choice), English Language (Multiple choice) the components of which are word usage, vocabulary, spelling, grammar, punctuation and reading.

Student Assignment

There is great disparity in the quality and the aptitude of students who enter the various secondary schools in St. Lucia. The total intake and cut-off point are different, with the two older secondary schools and Castries Comprehensive Secondary School, the oldest in St. Lucia (1972), accommodating most students with the highest scores. Below is a Table with the secondary school intake and cut off points for 1993.

Table 3: SECONDARY SCHOOL INTAKE - 1993

SCHOOL	MIN. SCORE	MAX. SCORE	RANGE
St Mary's College	122.1	135.8	13
St Joseph's Convent	121.8	135.9	14
Castries Comprehnsive	118.9	133	15
Leon Hess Comprehensive	113.5	119.7	6
Entrepot Secondary	111.7	118.9	7
Corinth Secondary	109.6	118.8	9
Vieux Fort Comprehensive	106.9	134.7	28
Vide Boutielle Secondary	105.1	113	8
Sir Ira Simmons Secondary	104	118.9	14
Choiseul Secondary	102.6	131.7	19
Micoud Secondary	102.4	122	19
Soufriere Comprehensive	101.9	123.8	22
Clendon Mason Memorial	101.4	121.7	20
George Charles Secondary	100.5	115.2	15

Source: Albertin, M. (1993). Common Entrance Examination: What can we learn from the results? St Lucia: Ministry of Education, Culture and Labour

The Caribbean Examination Council Examination (CXC)

For a very long time the Commonwealth Caribbean has depended on British academic and professional qualifications at most levels of education, and these have been

awarded by British universities, professional associations and examining bodies. But over the last three to four decades there has been growing concern that the needs of the Commonwealth Caribbean are not being met by these British examinations. Consequently, in the 1960's the Heads of the Commonwealth Caribbean countries took a decision to construct academic and professional qualifications and systems specifically appropriate to the Caribbean, and which will satisfy its educational requirements *"while maintaining references to the British models so that direct comparability of former and current qualifications remains possible"* (Fisher, 1979: 45). One such example of Caribbean direction was the establishment of the CXC with its headquarters in Barbados and an administrative and operational centre in Jamaica. Its primary objective was to replace the GCE O'level in secondary school completion certification.

After almost twenty years of negotiations and planning, CXC finally established an examination system that retains the academic standards of the British GCE O'level but which is far more flexible in its ability to meet the limited academic goals of students and also those who are technically inclined. Thus, the CXC system was designed to achieve the marriage of goals and standard found in separate examination systems in the United Kingdom (Fisher, 1979) namely, the GCE which was targeted at 20% of the age group, the Certificate of Secondary Education (CSE) aimed at 40% of the age group at an academic level below GCE, and the Technical Education examination aimed at the remaining 40% of the age group, but the standards and academic ability of the students cover a much broader range than either the GCE or the CSE. It allows students with differing goals and needs to enter a single system (Fisher, 1979).

The first CXC examinations were written in 1979, since then the number of subjects offered has gradually increased. The examinations are divided into two types: the General Proficiency with standards comparable with the GCE O'level, although in some cases the syllabuses are slightly above that of the GCE; and the Basic Proficiency, which, according to CXC has standards comparable to the CSE.

The CXC designations are briefly described by Council as follows:

Basic Proficiency - connotes subject activity designed to complete a secondary school course in the specific subject.

General Proficiency - connotes subject activity designed to provide a foundation for further studies in the specific subject areas beyond the 5th year of secondary schooling.

Much of the content matter for both syllabuses is similar, but that for General Proficiency are academically more demanding and in-depth, and requires greater application and analytical thought. Both were designed to be followed during the last two years of secondary schooling with a foundation of general education being established in the first three years. The students who enter for the General Proficiency are those who demonstrate higher levels of abilities. Others who are less capable and with lower levels of ability, enter for Basic Proficiency.

The examinations are being marked by experienced markers under the supervision of chief examiners of the subjects. The format of the examinations may include multiple choice, short answers, essays,practicals (for the sciences and technical subjects), and oral tests (for the languages). There is also the School Based Assessment (SBA) which counts for 35% of the overall grade, and which is required for certain subjects. This can take the form of an extended essay or a practical project depending on the nature of the subject. The SBA is marked internally but with external guide-lines. Random samples of these SBA's are usually requested by CXC to determine whether they were marked in accordance with their specification, before the final grades of all students are released.

The grading scale with definitions is given below.

Grade	Definition
1	The student has a comprehensive knowledge of the syllabus
11	The student has a working knowledge of most aspects of the syllabus.

111 The student has a working knowledge of some aspects of the syllabus.

1V The student has a limited knowledge of a few aspects of the syllabus.

V The student has not produced sufficient evidence on which to base judgement.

Grades 1 and 11 represent a quality of work which is comparable with GCE O'level grades A and B. It is noteworthy that the students are graded according to predetermined performance criteria and not on a statistical distribution as is done by GCE. In addition to the Grades, CXC also gives a profile of each individual subject and this is entered on the student's certificate. For example, a breakdown of a Mathematics General Proficiency profile may read as:

Mathematics General 1V: Computation C, Reasoning C, Application N/A

The **grade notations** are:

A above average

B average

C below average

N/A no assessment possible

History Basic 111: Factual knowledge B, Historical Inference C, Contextual grasp C

A copy of the CXC Certificate is produced as Appendix 1.1

Conclusions

"We have survived the moral and psychological travail of slavery and indentureship, Crown Colony government and cultural deprivation" (Demas, 1971: 7), but the psychological scars will always remain. *"Men and women have not yet been able to recover their social character, their profound personality, their humanity and beauty which colonization has alienated"* (De Pestre, 1973: 51). According to De Pestre, our cultures continue to grow to the rhythm of western neo-colonialism and lack the

possibility of advancing in accordance with their own internal dynamism.

Societies today maintain the traditional features of stratification by colour and race as well as a certain degree of integration. The dominant social system produces good only for some, and for those who do not share in the social good, are aware of their relative disadvantage and therefore seek to transcend this domination (Henry, 1983). A situation he believes is consistent with the Marxist notion of praxis or the self production of society. But within the limits of structural pressures, some members of the disadvantaged group have been able to negotiate their transcendence over this social and economic domination. Consequently, there has been a shift in the horizontal position which kept the Black people in the lower class category. A shift which was created partly by an increase in educational opportunities for Black people, and the diversification in the structure of the traditional plantation economies. Nevertheless, large numbers are trapped in their disadvantageous conditions.

In Boulding's (1960) analysis of the dynamics of society, he stated that the people of today are what they are because of the influences which have made them so. Slavery is still a central factor in the Commonwealth Caribbean. Springer (1965) says that " *we have not yet rid ourselves entirely of the mental shackles of the past*". The society which we have inherited is producing frustrated and discontented youth from impoverished families more rapidly than jobs, houses and other amenities. The consequences of these circumstances are urban and suburban slums and ghettoes with dwelling places unfit for human habitation, and most often defy the simplest observances of decency and morality, multiplicative delinquency, unskilled labourers, unemployment and under-employment, impermanent sexual relationships, lack of parental control and child centredness, parental neglect, crime and illiteracy, and malnutrition.

These are the conditions under which the children under study live and grow: deplorable, deteriorating and lamentable, further effectuated by economic distress and inequality of access to educational opportunities; all legacies of their historical past. Obviously anthropologists, social psychologists, psychopathologists and others have

concluded that such children who are exposed to such pathetic, sub-standard and deprived environmental conditions cannot be expected to achieve educational success and become competent. Yet, despite these conclusions, researchers have discovered that in the midst of, and in spite of these disadvantaged conditions and the presence of risk and stress factors, some children become resilient and achieve educational success.

Summary

The preceding historical analysis presented a cursory examination of the circumstances which led to the prevailing disadvantaged conditions under which children of the lower classes live and grow, the social and economic inequality and inequity of access to educational opportunities. Child rearing practices must be placed within the context of the family's present environment, social background and family practices all of which influence the patterns of child development. It is within this context too, that one can study the presence of protective and resource factors, and the risk factors in the lives of resilient children in St. Lucia; factors that influence their educational achievement.

"Such is the background ... " (Sherlock, 1973: 11).

CHAPTER III

FACTORS INFLUENCING EDUCATIONAL ACHIEVEMENT IN THE COMMONWEALTH CARIBBEAN

If things are not what they seem,
we need to have reliable ideas
on what is real
Murray & Gbedend, 1983: 69

Introduction

Educational progress is determined by many factors within children's home and family, the school and their own personal characteristics. One of the major factors influencing educational achievement is the SES of the child's family. Research findings (e.g. Edgeland et al, 1993; Garmezy, 1991) have given us reason to assume that children living in poverty were functioning very poorly in many areas including academic performance. However, despite the fact that low SES is associated with poor academic achievement, disadvantaged children have achieved educational success. There are many reasons for this which will be elaborated in this chapter.

In the present study, resilience is concerned with educational achievement in severely disadvantaged children. This chapter identifies the factors which influence such achievement.

Educational Achievement

In a West Indian context to educate means to train and is a *"process of helping the individual to bring out the abilities and potential he possesses both of mind and body" (Murray & Gbedend, 1983: 55).* Experiencing education is a continuous process through which individuals learn about themselves, their immediate environments, the community in which they live and the world. They also learn to formulate their own aims and objectives, and to determine how these could be achieved. Because experiencing education is continuous, much of its achievement must depend on the individual but under the external guidance of people who know and understand, and can reinforce its growth value. This educational growth is in part dependent upon the internal forces which operate within the child. Thus, loosely defined by the writer, "educational achievement" is the ability of the child to meet the demands of classroom

learning, to cope with the challenges of curriculum content, and attain a level of academic competence which is in keeping with his or her level of ability or potential.

The School System

As noted in the previous chapter schools are overwhelmed with stress inducing factors (Humphrey, 1984), hence a great deal will depend on the child's coping ability if he/she has to adapt to conditions in the school and classroom in particular. Using Garmezy's (1985) "*category of protective factors*" he noted that the School, which forms part of the "*social environment*" category by reinforcing the coping capacity of children may have a great impact on educational achievement either independently or in conjunction with family, home and community factors (Reid, 1976). Rutter (1983) also noted the socialising influence of a positive school environment. However, Lynn (1959 cited in Reid, 1976: 224) received support from Reid (1976) by observing the tendency for large schools to attract good teachers as well as children of different levels of ability, thereby providing a learning environment which is highly stimulating.

Caribbean schools are frequently criticised by parents and educators for supporting the values of the dominant class; a system which prevailed in the period of colonialism. Schools have been known to encourage a somewhat middle class culture and therefore primarily serve the needs of middle class children by treating them differently from those of low SES in both the quality and quantity of education. For example, the trend in Caribbean schools is for middle class children to opt for more subjects and to specialise in the Sciences, compared to the children of low SES to choose fewer subjects in the Arts and General Studies. However, if one requires the West Indian society to retain its present social class configurations and the disproportional access to education, wealth, power, social and economic mobility, one should not disturb the methods of education in existence.

The caste-like system which exists in the wider community is being reinforced in the classrooms of public schools by the teachers. As a consequence, the critics argue that

the children of the working class families do not profit much from schooling, but those who do aim to succeed need to have good coping skills to deal with the situation.

Schooling has direct effects on the educational achievement of children notably the acquisition of literacy, numeracy and scientific knowledge (Sylva, 1994). These basic skills provide the foundation for the learning of the academic subjects, hence the resilient child needs to acquire formal educational qualifications such as six CXC O'Level General Certificates, to be eligible for access to the Sir Arthur Lewis Community College, St. Lucia's only tertiary institution. The acquisition of specialised knowledge and skills is a direct consequence of classroom teaching (Good & Brophy, 1986b). However, the school influences social cognitions and feelings and these are powerful predictors of later outcomes such as intelligence and academic competence. These indirect effects of school are mediated by the motivation of children to learn or not to learn, their perception of themselves as students, and the attributions they create to explain success or failure (Sylva, 1994).

Throughout the school system incentives are used as means of encouraging children towards academic achievement. These incentives take different forms according to the level of education. At the primary schools these range from achievements charts on which different colour stars are placed to represent students' levels of achievement in a particular educational activity, to awarding prizes to outstanding students. At the secondary level incentives are widely spaced and are in the form of certificates and prizes which are given to outstanding students at the end of the term or academic year. While many disadvantaged children will aim for an award, others will admit that such is beyond their reach or are not interested.

However, in effective schools where administrators help to establish a learning environment which is academically oriented, classroom incentive programmes may be incorporated with school-wide recognition programmes. These incentive systems may be structured in such a way that rewards are frequently given, often in public, to a high proportion of students for a variety of reasons, but in particular academic

success (Rutter et al. 1979). These researchers also indicated that effective leaders in effective schools will define academic and behavioural standards and expectations to their staff, and will ensure that they apply to all students irrespective of their SES background. Teachers will therefore be held responsible for students' progress.

Nevertheless, to help teachers carry out that responsibility, administrators of effective schools conduct staff development programmes in an endeavour to improve teachers' teaching skills, their pattern of teacher - pupil interaction, and their methods of assessing pupils' achievement. They also establish links between the home and the school. These administrative methods help to create work environments that support the teaching-learning process, and help provide the kind of supervision and support network that increase children's chances of educational achievement. Undoubtedly, schools are important and essential, but without the support of the home can rarely succeed in providing the intellectual nourishment which disadvantaged children require in order to achieve educational success.

Class enrolment size is another school factor that can influence student's achievement. Reid (1976) is of the view that large classes (particularly at the primary schools) may set limitations to teacher-pupil interaction thereby demotivating both the teacher and the students. In contrast, teachers with large classes but a light teaching load, especially at the secondary and post-secondary level, may be motivated to teach.

Also of concern to the disadvantaged child achieving educational success are such factors as their attitudes and values, previous educational experiences, the level of effectiveness of schools attended, the level of education being achieved, and the location of the school currently attended (rural or urban). In St. Lucia the differences between rural and urban schools are distinctly marked with respect to facilities, quality of staff and teaching, and examination results. The assumption therefore is that children who attend rural schools are at a disadvantage in achieving educational success compared with those attending urban schools. This is especially true for children living in small communities in rural areas where schools are isolated from one another and from the towns and villages where secondary schools are located.

The isolation of these rural schools more or less impoverishes the rural environment and exerts a form of effective educational deprivation and disadvantage on the children who live in these areas. Hence, a child from the rural school will have to work exceedingly hard, be properly motivated and stimulated, and receive support from home and school in order to become educationally successful. Also, one of the traits Woodard (1992) associated with urban children who have achieved educational success was *"Faith in a higher power"* (p. 61). This, he believed, gave them an enigmatical sense of being one with reality. However, some disadvantaged urban children overcome the odds and achieve educational success; but they are only a minority.

Teacher Expectation and Classroom Behaviour

Teachers also form part of the "*social environment"* category or external support system proposed by Garmezy (1985). They have the most direct responsibility for bringing the aims of education discussed in the previous Chapter to realisation, and to help children to achieve educational success. Their role is formed in response to the needs and expectations of different people. These include the children they teach, their parents, other staff members, school managers, and Ministry of Education officials. Thus, their role as teachers has to be played in response to both individuals and groups, and since attitudes and expectations are not always the same, the role demands maturity and sensitivity. Teachers whose background enables them to fit in well with both their colleagues and the wider community, find it easier to gain role security.

In St. Lucia the role which is most commonly emphasised by educators and politicians is preparing others for the 21st century. In primary schools certainly, and to a lesser extent secondary and post-secondary schools, teachers are expected to guide students to realise the ambitions parents have for them. However, teachers cannot make up entirely for children's disadvantageous position. They can take steps to identify the fundamental learning needs and direct their teaching to these needs. It is their responsibility to make *"education digestible to all"* (Murray & Gbedend;

1983: 77). According to them *"The good thing that knowledge brings in its train are not for one class, creed or race alone".*

A large number of St. Lucian teachers come from lower - middle or lower class backgrounds yet they behave like middle class oriented individuals, and therefore subscribe to that class' criteria of value and success. Thus, the values they presumably stand for coincide with those of advantaged children. Consequently, there is a tendency for teachers to behave differently towards children from socially disadvantaged backgrounds, and have different expectations of their ultimate educational achievement. Certainly such notions can be highly detrimental to children of lower class families who make up some 70% of the school system.

As stated, most teachers have preconceived notions and expectations of the potential academic performance of children from disadvantaged backgrounds. They expect that the higher socio-economic status children will achieve more than their less advantaged peers. Tragically, as a consequence, those children from low SES suffer a stigmatisation because they are poor. Thus teachers divide their classes into a stratification system delineating achievers from underachievers. Teachers are not always wrong in their judgement of students, but what is of concern is when they are bias in their assessment, and cause the good or poor performance on the basis of their expectations.

Obviously the underachievers are the disadvantaged children placed into that stratum on the basis of the teachers' expectations relating to the behavioural and attitudinal characteristics of the child, and also various SES factors associated with the child's social background. Clark (1963) noted that the teacher's expectations of a child's academic performance may have a strong influence on the actual performance of that particular child. This view is also supported by Wheldall and Merrett (1989) who observed that teacher expectations have consistently affected pupils' performance and that *"social class has been readily and equivocally accepted as a critical constituent of teacher expectations" (p. 327).* This view validates a type of *"ideal type syndrome"* or *"educational self-fulfilling prophecy"* as put forward by Rist (1968) if

the teacher expects high performance from students, he/she receives it, and vice versa". Therefore, teacher expectations, with respect to educational achievement is seen by Wheldall and Merrett (1989) as

> *directly influencing pupil gains in I.Q., as depressing academic performance, and as instrumental in the classification and ranking of pupils (p. 328).*

However, the fact that children are born to lower class parents and live in poor neighbourhoods, does not necessarily mean that they are underachievers or deprived of talents and abilities. Therefore, what is required to help vulnerable children achieve educational success is a certain level of understanding of them in a supportive classroom environment.

Educational Achievement and Heredity

A traditional viewpoint which is still widely accepted, is that individuals who have been outstanding depend on their inherited gifts or talents. However, there is a substantial body of opinion opposed to this view (e.g. Howe (1990). There is evidence to suggest that the majority of children are born with the capacity of acquiring high levels of competence if the circumstances of their lives make it possible for them (Ericsson et al., 1990; Freeman, 1990). *"Essentially, what a person becomes depends on what happens in that individual's life" (Howe, 1990: 6).* Notwithstanding that fact, the influence of native endowments in educational achievements cannot be ignored. As Douglas (1964) noted educational psychologists *"...recognise that innate capacity may well be the most powerful influence in determining the level of achievement at school"* but they (educational psychologists) realise too that

> *there is evidence that extreme poverty of the environment leads to a progressive deterioration in academic ability (p. 31).*

More importantly, educators and psychologists now recognise the desirability of improving children's environments, and argue that protective factors can be used to

moderate the effects of any environment which puts them at risk of educational failure.

Individuals differ in genetic composition from birth and characteristics from a very early age. This difference can later influence children's development in ways that may increase or decrease their chances of becoming educationally successful. It can be assumed that different levels of educational achievement in children will, to some extent depend on their inborn qualities or aptitudes and the social context within which they live. Hence, genetic factors might impose limitations on individuals achieving high levels of academic performance, and also affect performance of a non-academic nature. These views are in keeping with the genetics theory of resilience which noted the significant role of genetic factors in determining individual differences in intelligence (Shields, 1977).

It is believed that children's capabilities can be cultivated (Howe, 1990), yet it is not always easy to explain human accomplishments nor to produce a formula for helping children to be educationally successful. However, it is highly probable that the home and the school can take steps to greatly increase the chances of any child irrespective of level of ability to achieve some level of educational competence. Howe believes that

> *with a small amount of help and guidance, the majority of ordinary parents are capable of doing a great deal to help make that possible (1990; , p. viii).*

Therefore, it can be argued that even when children are not genetically endowed with intelligence, a great deal can be done to influence intellectual development by manipulating the environment. This implies that disadvantaged children who are genetically vulnerable and experience trauma within the environment, may be at a disadvantage with respect to achieving academic success.

The Family

Familial or a supportive family milieu was one of the three protective factor categories proposed by Garmezy (1985) and Grossman et al (1992). This section identifies various aspects of familial support and their effects on educational achievement.

The Family and Home Background

The educational achievement of disadvantaged children is seriously affected by the life lived in poor neighbourhoods such as slums, squatter areas, and the rapidly spreading ghettos of the city suburbs and towns. Children from such backgrounds are at risk for educational failure as a consequence of the disadvantages of poverty which they suffer. These include absence of educational activities and toys, books and good music and grammatical speech, well informed conversations, adequate nutrition, poor housing and overcrowded conditions and family discord.

Disadvantaged children are not disposed to look too far into the future but seek immediate gratification. Also, they tend to have a short school life because they become aggravated by the poverty of their families, and consequently find it difficult and unappealing to continue in education or to proceed to an institution of higher learning. It is expected by teachers and Health and Family Life educators that at school these children will demonstrate some of these characteristics:

1. inability to concentrate
2. restlessness
3. boredom
4. lack of drive and enthusiasm
5. difficulty in learning the standard English language
6. unethical and unacceptable behaviour
7. apathy
8. uncomfortable and alienated

Frequently the home and social environment of these disadvantaged children are less structured than those of the advantaged children. The time to study, sleep, play and do the house chores is less definite, less ordered and less rigorous. Reading and study seem unimportant. Child discipline is haphazard and usually full of parental threats that are not heeded. Their parents place little or no restrictions on them with respect to their choice of friends. Hence, they get involved in groups and gangs who discourage effective school work. At this level of social upbringing, these disadvantaged children are often exposed to crime and other anti-social behaviour. It also suggests that as a rule children from disadvantaged backgrounds do not master their school work and will therefore experience difficulty in achieving educational success. Furthermore, the lack of interaction with their class teachers and positive role models to identify with, the caste aspects of being placed in a lower group, and being the source of ridicule by the advantaged children, tend to lower self-esteem and a decline in the value they place on education and achieving academic success.

These disadvantaged families who are exposed to socio-economic deprivation find it difficult to extricate themselves from this condition. This deprived situation that they find themselves in often leads to despair, depression and a sense of hopelessness in an economy with high unemployment and underemployment. Whenever jobs are available for them, it is always menial and low status jobs for very low wages; a continuation of colonial trends.

However, to a considerable extent it is the home and family that provide the kind of experiences and opportunities which make it possible for some disadvantaged children to become educationally successful. Whenever educational success has been achieved Howe (1990) believes that

> *there existed background circumstances that provided opportunities for learning and encouragement for making progress (p. 97).*

There is evidence to suggest that the family and home background contribute to the acquisition of particular skills and abilities (Garmezy et al., 1984). There is also evidence to suggest that the children's SES background can affect their cognitive and

language development, and this is very often reflected in their performance on standardised tests of achievement and intelligence (Jiaying, 1990). But the various ways in which children's capabilities reflect their influence are highly diverse. However, in many more ways than one, the effects of the home and family upon individual's abilities are usually profound. Therefore, it is realistic to assume that the family and home background is the region which provides the greatest scope for intellectual development and consequently educational achievement. Although socio-economic conditions do not by themselves predict the behaviour and performance of children, the attitudes and motivations of parents, and the patterns of interactions which take place in the family do (Kahl, 1985).

In very many ways the child's home is an ideal environment for learning. Much depends on the opportunities that families help to make available to the child. It is there that the child is confronted with opportunities for regular and frequent one to one interaction with adults; particularly those who have a comprehensive knowledge of the child as a "human being". Although many teachers have successfully helped children to achieve educational success, yet it would be impossible for even the best of them in the best of schools to match such opportunities presented by the home. This view was forcefully observed by Howe in his statement:

> *This under-used potential source of opportunities that could produce major gains in young children's educational progress, it is probably correct to say that, for many children, the home background now offers more scope for improvements than schools do. For obvious reasons that is especially true in relation to progress in the crucial earliest few years of life (1990, p. ix).*

For children to achieve educational success, the family circumstances they experienced during the childhood and adolescent stages must offer to them some form of encouragement, motivation to learn, and some reward as an incentive to learn. This view receives support from Song (1982, cited in Song & John Hattie, 1984: 1269) who indicated that the family psychological characteristics (which, according to him are a facet of home environment) which include parental encouragement and expectations, educational activities in the home, parental educational interests and

their evaluation of intellectual qualities of the child, and systems of rewards and punishments are all positively related to educational achievements.

In addition, to achieve success, children need to identify with their learning experiences so that they can activate their motivation and determination to learn. Duncan (1990) believes that the more children identify with what is happening in their environment, the more motivated they become and the greater their chances of educational achievement. Thus, parents of children who place high value on education will make considerable efforts to ensure that they are stimulated to learn particularly in early childhood, and that they are provided with positive role models and "mentors".

Investigators indicate that the need for educational achievement can be strongly influenced by parental attitudes and values (Jiaying, 1990). This investigator is also of the view that

> *parents' attitudes and values towards education, success, and achievement, and their expectations of children's performance in school and in society, affect children's achievement, motivation, attitudes, and values (p. 586).*

Language Development

In St. Lucia the official language is English, yet the language spoken by the majority of lower class families is the French Creole or "Patois"; a French dialect inherited during the period of colonialism, and one which "*incorporates the entire history of the indigenous people of the island" (Alleyne, 1961: 211).* Although used in oral communication, "Patois" is not to be used in written communication at any level of the school system.

Children who communicate using Standard English both in and out of school are likely to have an advantage over those who very often use the French Creole or "Patois". The disadvantaged children who frequently communicate in this French

dialect, will encounter difficulty in trying to master the educated language of school (Standard English) in which academic activities are being conducted. As Labov (1969) observes, Standard English is essential for educational achievement. Thus, children of low SES who are not sufficiently competent in Standard English, will be "linguistically handicapped" (Craig, 1974) and will possibly experience cultural discontinuity when they have to cope with two radically different systems of communication.

Parenting and Child-rearing Practices

The ways children develop during their early years of life are affected by the way their parents assume the role of teacher, and by the quality of child rearing practices and patterns of interaction.

> *Other things being equal, a child who, as a result of the mother's effectiveness as a teacher, gains useful abilities that facilitate the acquisition of further skills, will thereby have a definite advantage over less-favoured children." (Howe,1990: 114).*

However, favourable circumstances can change. A mother who is usually very effective at providing an educationally oriented environment in the early years of her child's life, may not be in a position to stimulate and provide support and encouragement for learning in subsequent developmental stages. This change in family circumstances is usually accompanied with alternative family styles. The mother's changing role in a one-parent family as a consequence of the father's absence due to death, desertion, long separation, and divorce, may result in a change in mother-child relationship. Besides the effects of the mother's changing role, father's absence has been known to have negative effects on intellectual performance and academic attainment of children (Eiduson, 1985; Reid, 1976). Further, Ramirez and Parres (1957, cited in Reid, 1976) note that achievement is impaired where

> *children harbour suspicion, distrust and even hate, side by side with an impulsive identification with absent or unknown fathers (p. 223).*

Although it is not entirely clear the extent to which mothering activities influence a

child's educational competence at a later developmental stage, it is reasonable to assume that young children whose mothers respond sensitively to their needs and activities, are more likely to achieve educational success than children who suffer severe deprivation of caregiving. First-born children usually enjoy the exclusive attention of their mother and as a consequence, are expected to develop an intellectual orientation to their environment at an earlier age than those siblings who are not first born. A further assumption is that mothers who respond sensitively to needs of infants who are securely attached to them, continue to be sensitive to the needs of the same children in subsequent developmental stages.

In St. Lucia some parents have been successful in creating opportunities of early and later learning for their children. There are parents who themselves did not do well at school or who never attended school, who nevertheless are very eager to do all in their power to ensure that their children achieve what they did not. On the other hand, there are families with parents who are seriously handicapped in assisting their children not only because of their own educational limitations, but because of the large number of children in the home, parents' employment status, and their inability to afford higher education. With respect to large family size Nisbet (1961, cited in Reid, 1976: 223) suggested that sibling interaction with adults is lowered, and as a consequence verbal development and test scores are also lowered.

A view often expressed by parents from these poor neighbourhoods is that learning should take place in the school, and that it is the responsibility of teachers in schools to provide the instruction for children to achieve educational success. Others are too busy and have little time or energy left to spend with their children, to instruct and encourage them, to identify and satisfy their individual needs for support because they have to go out to earn a living. While some others do not consider teaching their children a priority, neither do they have a high regard for educational achievers. As a consequence the good opportunities which can be created by the home to provide the necessities to improve learning are not being explored by parents.

Parents are yet to realise that what goes on in the home may be very relevant to how

the child determines to achieve in school. Yet, as Dyer (1976: 219) states *"It is not so much what the parent has as what he does with and for the child that has the greater influence on the child's performance."* Howe (1990) made the point when he suggested that if most of these parents were made aware of the possible benefits that could be obtained as a consequence of their efforts to assist their children's progress, and if they were provided with guidance on how to proceed, they would have achieved more in helping their children achieve educational success. Thus, given sufficient opportunities and enough encouragement a child is capable of achieving educational success. Belsky et al (1984: 66; cited in Van Ijzendoorn & Bus 1990: 467) concisely summarised the results of research on the relationship between parenting styles and school performance in this way:

> *∴the most effective pattern of parenting for facilitating children's success in school as well as their general intellectual development, seems to involve being nurturant without being too restrictive, responsive yet not overly controlling, and stimulating but not too directive (p. 467).*

Effects of Malnutrition

Proper nutrition is one of the most significant components of good health, and should therefore be a factor worthy of the concerns of educators. Its function is to provide the energy and body-building needs which the human organism requires during the critical periods of development. Poor nutrition during the early critical periods can significantly influence the academic performance of children during the later years in school (Thomas, 1985).

Studies centred around these issues have shown a consistent positive relationship between academic success and good health (e.g. Schultz, 1985; Smart, 1972; Thomas, 1985). But it can be argued that while this relationship would appear obvious, it is very difficult to establish. The reason being that there are other factors which, directly or indirectly, also affect educational achievement. Hence, the question of the relationship between educational achievement and a good diet needs

to be explored. However, the developmental process which requires a continuous supply of nutrients and energy can be hampered by a poor nutritional environment. Hence, a lack of adequate food can very often become an obstacle in the way of children's educational progress in school, and how they develop their gifts and talents (Kahl, 1985; Smart, 1972).

Students' Characteristics

To understand the origins of educational success, it is useful to understand the attributes and the lives of the achieving individuals. By following how an individual progresses through life, usually through a longitudinal study, the investigator can gain insights into how the child experienced life under various circumstances, and obtain a long term perspective on the significant events and their effects on the child's life. Rutter said that

> *People differ in the pathways via which they travel from one point in life to another, and the different ways in which individuals act serve to shape experiences that are entirely unique to them (1989, cited in Howe 1990: 17).*

Whereas the manifestation of educational achievement may be intellectual in orientation, Howe (1990) is of the view that drives and motivations and personal characteristics which eventually produce this achievement are not. According to him great achievements are usually accompanied not only by intellectual abilities but by the individual's strong sense of direction and single-mindedness. In addition, Howe believes that

> *... the strength of their commitment and determination, their dedication, and their ability to persevere in the face of difficulties and to concentrate on reaching their goals whilst resisting distractions (1990: 17)*

are motivational factors that are just as crucial in driving human activities towards success as intellectual qualities are.

These motivational influences vary from one developmental stage to the next and between individuals, yet they play a very crucial role in effecting educational achievement. Therefore, any child who is deprived of the kinds of experiences which will eventually develop into personal qualities will undoubtedly become vulnerable to educational failure.

To increase their chances of educational resilience, children need to be able to concentrate, demonstrate high levels of emotional stability, efficiently adapt to new and unexpected situations, and organise their behaviour in a way which takes into account both the present and the distant future. It is important that they have the will to delay immediate gratification which, in the long run, will produce long range goals and greater satisfactions. Besides, self-discipline, intrinsic motivation, and high aspirations are essential if children are to establish rational goals and perform their educational tasks. Sinclair (1985) noted that there is a tendency for students with high achievement needs to have high but realistic aspirations with respect to classroom learning and performance, and will demonstrate greater persistence where achievement situations are concerned. These strong strivings to achieve success, Sinclair believes, is a result of achievement motivation. Studies carried out by Gottfried (1985) demonstrated a significant and positive correlation between *"academic intrinsic motivation"* and *"children's school achievement and perceptions of academic competence"*. However, despite these observations and findings which, like many others are well documented, studies have not been able to establish with any great degree of superiority, the causal dynamics underlying those relationships between classroom performance and achievement motivation or academic intrinsic motivation. This is not particularly surprising given the numerous other protective factor variables that operate to influence educational achievement.

Having a high self-esteem is a pre-requisite for academic success (Maruyama et al, 1981). Research supports a positive relationship between academic achievement and the level of self-esteem (Atherley, 1990). In a review of the literature on the effects of education on children's development Rutter concluded that:

the long term educational benefits stem not from what children are

> *specifically taught but from effects on children's attitudes to learning, on their self-esteem, and on their task orientation (Rutter, 1985a; cited in Sylva, 1994).*

On the question of improved self-esteem of children of low SES backgrounds, Kenneth Clark and Coleman et al (cited in Maruyama et al, 1981) concur in their views that improved self-esteem will result in an improved academic achievement. In other words, they presuppose that the existence of a positive relationship between self-esteem and achievement, and position self-esteem *"causally prior to, or at least as reciprocally related to, achievement" (p. 963).* They further indicated that *"self-esteem mediates the relation between background variables and scholastic achievement" (p. 963).*

Disadvantaged children need to be motivated to achieve academic success, by endeavouring to acquire a sound knowledge of the content of the subjects in their curriculum. The acquisition of language skills and reading ability are important for class participation in educational activities. Also, they need to be optimistic and self confident, and believe in themselves and their ability to cope and succeed against the odds rather than believing in "luck and chance". In other words, having an internal locus of control is crucial; a factor which, in recent years, have interested researchers of achievement motivation. This (internal locus of control), William E. Henley (cited in Woodard, 1992) called the *"Invictus Syndrome"* in his poem. Woodard (1992) believes that they might be inspired by the last lines which reads thus: *"I am the master of my fate; I am the captain of my soul."(p. 6)*

Conclusion

The poor conditions in which disadvantaged children live, disharmonious family relationships, the difficulty to cope with the transition from primary to secondary education systems, ineffective teachers, all contribute to a self-fulfilling prophecy and a decline in academic achievement and their inability to cope with classroom learning. Some of children particularly at secondary school, give up altogether and "form the residue of disaffection found in the upper age levels of many secondary schools"

(Howe, 1990;). This result is in keeping with Horowitz (1987) *"structural behavioural model of development"* which suggests that success in the face of great difficulty can change at different developmental stages, in that case from primary to secondary education stage. In addition, the *"balance theory"* proposed by Werner (1984) also suggests that the possibility of achievement at one developmental stage is likely to change at the next stage with an increase in the number of risk factors in the child's life. Hence it is often impossible for children to adapt when confronted with a multiplicity of stress factors (Rutter, 1979). Unless something drastic happens in their lives to reverse that position, it is likely that they are the ones whose initial success begin to fade. As Howe (1990) states a person's own experiences will to a large extent determine what he or she learns, achieves and becomes.

Poverty has been said to cause educational failure. However, there are many children from poor backgrounds who have been able to achieve educational success despite being exposed to adverse circumstances. Achievement against the odds is the essence of resilience. The combined effects of parental encouragement, the presence of positive role models, a supportive school and classroom environment, hereditary and other personal characteristics, and parents eagerness to ensure that the child has opportunities to study and learn, can help create an atmosphere of emotional and intellectual nourishment which increase the child's chances of becoming educationally resilient.

CHAPTER IV

THE DEVELOPMENT OF THE THEORETICAL CONSTRUCT OF RESILIENCE

"And there has been no more rewarding experience for us than to see the awakening and blossoming of resilience in children whose prognosis looked bleak and empty after trauma"
(McGeady, 1994: 3)

Introduction

This chapter is designed to give an understanding into the construct of resilience through a review of the literature. This will include constructs underpinning the study of resilience namely risk and vulnerability, stress and coping, protective factors, a diversity of conceptualizations of resilience, different theoretical perspectives and models, and the implications of the study of resilience.

Until recently, successful adaptation had been ignored by risk researchers who concentrated their efforts on examining the more pessimistic aspect of the risk - psychopathology equation in the different developmental stages searching for sources and antecedents of negative behavioural outcomes. Although *"the roots of the field of psychology -normative behavioral processes"* (Hauser et al, 1985: 85) had been neglected, there was evidence of adaptive behaviours in these early times which was considered atypical. Hence, researchers frequently took a deterministic view of the developmental process and concluded that it eventuates into maladaptation, and adversities.

In recent years, there has been an increased interest in the adaptive pattern of behaviour. Thus, the focus of investigation has shifted to the more optimistic component of the dichotomous risk - psychopathology equation namely 'resilience' (Cicchetti and Garmezy, 1993).

Garmezy and other pioneering psychopathologists recognised the need to develop a "developmental perspective and the theoretical and clinical significance of studying adaptation in children vulnerable to psychopathology" (Masten et al, 1990). Hence Garmezy (1973) for instance, deviated from the illness model of psychology and

gravitated towards a model based on health rather than illness. He recognised that to effectively study deviations in behaviours or abnormality, it is imperative to have a clearly defined conceptualization of what normality or health means. Accompanying this focus of health related processes has also been the conceptualizations of resilience and vulnerability, together with new antecedents and correlates of the development of resilience (Garmezy, 1986).

As interest in resilience grew in intensity, investigators discovered that the construct has also been evident in situations associated with poverty, traumatic conditions and chronic stress (Cicchetti and Garmezy, 1993). Evidently, it is on the basis of the adaptive functioning of high risk individuals that researchers developed theories and research in resilience (e.g. Anthony and Cohler, 1987; Garmezy, 1985, 1986; Horowitz 1987; Luthar, 1991; Masten, Best and Garmezy, 1991; Werner and Smith 1982; Werner, 1989).

Thus, the children who have successfully survived adversity, have aroused the interest of researchers who now seek to identify the attributes and explore the variables which promote resilience. The search is to adequately and comprehensively answer this question to which researchers seek answers, but are yet to produce very definitive answers: What makes many children and adolescents who are at risk of psychopathology overcome the adversities of life and become well adapted and functioning individuals?

Research on resilience is performed under related headings such as protective factors, stress and stress factors, coping, risk and risk factors, competence, vulnerability and invulnerability. As a consequence, Losel (1994) believes that children are now being viewed as taking a more decisive role in shaping their own development and are therefore becoming more resistant to stresses, strains and deprivations. But irrespective of his view, researchers have to examine the lives and immediate environment of children on an individual basis, and try to ascertain with some degree of precision the factors that contribute to resilience or vulnerability in each individual child.

Hence, in their exploratory work on resilience, researchers have regarded the phenomena confronting them differently, using different theoretical perspectives and concepts to explain them (Rutter, 1987), and the language used by them often determines their area of specialisation and the direction of their investigation (Anthony, 1987). Some of these factors associated with resilience are discussed below.

Risk and Vulnerability

"Where risk is concerned no man is an island"
(Anthony, 1987: 4)

The Concept of Risk, Vulnerability and Risk/Vulnerability Factors

The study of risk has distinct implications for vulnerability and resilience. It has not only provided the context for the study of psychopathology but also for the healthy side of psycho-social development. Risk is the probability that given factors will have negative effects on an individual. These factors can be genetic predispositions or external to the individual, and can increase the risk of a given outcome occurring. Vulnerability, on the other hand, innate or acquired, refers to an attribute that may endanger adaptation because it increases the effects of stressors or risk factors (Masten, 1989). Another definition of vulnerability is being subjected to or exposed to risk factors. For example, a child in a poor family is vulnerable to the consequences associated with poverty. However, previous research studies have identified risk factors which include birth complications (Field, 1980), poverty (Garmezy, 1983), separation (Rutter, 1972), adverse socio-economic factors (Essen & Wedge, 1982), poor home environment (Werner & Smith, 1982) or parental psychosis (Wynne et al, 1982).

Previously, risk was used specifically as a strategy to study pathology (Fisher et al, 1987). But a side effect of the risk paradigm emerged when risk researchers encountered individuals who were at high risk of psychopathology with no diagnosed pathology. In accordance with risk research, such individuals were considered as a

negative consequence who reduced the sample size on which profound etiological factors were studied (Fisher et al, 1987). According to them, despite efforts to restrict the samples to subjects with inordinately high levels of risk, there were still individuals who produced positive outcomes. Consequently, researchers confounded the etiological studies and continued to draw attention *"to the pervasive resilience and fortitude of many individuals who are at risk"* (Fisher et al, 1987: 212). Thus, researchers who study children at risk have consistently observed that, despite the adverse effects of stress in everyday lives, there are many children who manifest competency and are autonomous in their behaviour, compared to the majority of others who, when exposed to similar stressful situations, develop serious problems with coping (Garmezy, 1981; Werner & Smith, 1982).

An assertion was made by Winfield (1991) that the concept of risk is being indiscriminately used to characterise youth who have a high probability to suffer negative developmental outcomes such as school dropouts, teenage pregnancy and drug abuse. Research has confirmed that many of these 'at risk' youths live in major urban cities with high unemployment rates and rampant poverty; where drug use and criminal activities are commonplace; and high stress affects both the home and family functioning as well as the school environment (e.g. Birch and Gussov, 1970; Garmezy, 1981; 1991; Madge 1983, Osborn, 1990; Pilling, 1990; Rutter, 1979; Rutter and Madge, 1976; Winfield, 1991). Statistically, these risk factors indicate probable behaviour maladaptation and developmental delays to which the children become vulnerable. The assumption can then be made that children exposed to risk factors which increase the probability of an adverse outcome become vulnerable to that outcome.

But realistically, not all risk factors inevitably transform into negative outcomes (Rutter and Madge, 1976); nor does it mean that children at risk are necessarily in trouble (Madge, 1983). Therefore, it is appropriate to assume that vulnerability does not always imply pathology (Beresford, 1994). Another assumption can then be made that children react differently to adversities generated from risk factors. Some risk factors have a generalised effect on many outcomes but others are highly specific.

For example, children of low socio-economic status are at increased risk of behaviour maladaptation, ill health and poor educational achievement, but children born to parents with a genetic disposition to a particular disease are specifically at risk or vulnerable to that disease but not other problems. This implies that some vulnerabilities may be specific and connected to a particular problem such as being at risk of educational failure.

However, in studying risk and vulnerability it is imperative to be aware of how they operate and interact with each other, and with other factors which decrease or increase the hazardous consequence of a specific risk (Honig, 1984). Attention must also be focused on the processes and mechanisms which counter risk factors and results in better adaptation (Rutter, 1977; Werner and Smith, 1982). But a disconcerting aspect of the risk concept is noted by Rutter (1987) who argues that risk factors are not only cumulative but multiplicative, for with each increase in risk factors for a particular individual, the overall risk also becomes multiplicative. He further suggests that with combined risk, it is not just the nature of risk factors but the multiplicity of risk factors that matters in making predictions about behaviour adaptation. However, Lambert (1988) optimistically conjectured that to reduce vulnerability and to protect against cumulative risk in the developmental stages, investigators must consider the particular factors that are most relevant for the outcomes of interest.

The Impact of Specific Risk/Vulnerability Factors

The effects of risk factors (whether genetic, socio cultural or demographic) increase the risk status in any developmental period. Risk factors such as poverty, racism, poor housing conditions, overcrowding, organic deficits, parental psychopathology, genetic deficiency, family discord or disruption in the family unit, in conjunction with personal risk factors such as illiteracy, low self esteem, external locus of control, social incompetence or inferior coping skills, increase the risk of pathology suggesting too that they exist in atypical situations. They are also referred to by some theorists as vulnerability factors.

Klaus and Kennell (1976) argue that the failure of parent and infant to develop an affectionate attachment is one of the most important risk factors in psychosocial development. Ainsworth (1982) too, emphasises the significance of early attachment but points out that failure of parent and infant to develop this affectionate bond can produce a variety of negative outcomes such as language delays and inability to thrive.

The personal quality of the primary caregiver also puts children at risk because their method of interaction can influence, how children develop trust, socialise and cope with their immediate environment. Martin (1981) commented on the basis of his research that personal interaction with the caregiver seems to have a greater influence on boys than on girls.

Other Research indicates the adverse effects on children of parents who abuse drugs. It has been noted that maternal drug taking during pregnancy increases the chance of babies being born at risk of developing poor social adjustment, behaviour maladaptation and poorer reading skills than children born to mothers who do not take drugs (Ministry of Health, 1994). There is also the possibility that maternal drug taking during pregnancy may increase the risk of producing a child with attention deficit disorders who may also become hyperactive - impulsive (Chase, 1980). Mothers with a high alcohol intake during pregnancy are at increased risk of producing mentally retarded and physically deformed children. In addition, pregnant mothers are being consistently warned about the dangers of tobacco smoking (Ministry of Health Education, 1994).

There is also the problem of malnutrition and diets with nutritional deficiencies which are considered as risk factors. Malnourished children from low socio-economic groups are known to be unable to focus attention on their school work or to learn as well as their counterparts. In their study of Mexican children in a poor rural area, Chaverz and Martinez (1981) isolated malnutrition as a risk factor and showed how it reduces educational achievement.

Some family life events and circumstances such as death of a parent, an unwanted baby, single parenting, teen parenting, father absence, long separation of parents from children, depression of parent, abusive parents and parental maladaptation, can place children at great risk of developmental difficulties particularly antisocial behaviour. Honig (1984) pointed out that many of these family risk factors may work in conjunction with or interact with biological, personal and socio-cultural variables to increase the effect of risk in a particular child. Although researchers agree that risk factors do not all have the same predictive effect, there is enough evidence in their findings to strengthen the prediction of certain behaviour maladaptation or developmental difficulties. In other words, it can be argued that different risk factors have different adverse outcomes, but some risk factors are more serious in terms of adverse outcomes than others. Yet, certain maladaptive outcomes seem to be the result of many adverse risk factors.

Garmezy (1981) also observed the effects of risk factors in the everyday lives of children but focused particularly on the factors that increased the risk potential of neonates. According to him, these include poverty, poor maternal health and nutrition, poor prenatal care, delivery complications and inadequate medical care. He is of the view that the effects of these risk factors in infants can influence

> *the pattern of maternal responsiveness, further heightening the severity of multiple risk factors that mediates the health outcome of babies. (Garmezy, 1981: 418).*

Garmezy's point of view raises the questions: At what age does a risk factor cease to be a risk factor? When or at what age are children most vulnerable?

But the factor which has been considered by many researchers as a major risk condition is 'poverty'. Consequently, a summary of its effects will be discussed.

The impact of poverty

"The destruction of the poor is their poverty".
(Proverbs)

Poverty can be defined in terms of the insufficiency of income giving rise to deterioration in life circumstances by the inability to secure the basic necessities essential for life (Oxford Dictionary, 1995). Townsend (1993) indicated that the correlation of ability and education can influence poverty. In other words, intelligent families are less likely to have low income and be subject to the effects of socio-economic deprivation.

Children in poverty live in circumstances dominated by a certain hopelessness in which the sense that things are inexorably running down, weighs constantly on every decision and inhibits many positive responses (Coates & Silburn, 1983). They live in physically unsatisfactory conditions, overcrowded and unsanitary, lacking amenities or generally in a state of disrepair (Brown and Madge, 1982 cited in Pilling, 1990).

Garmezy (1991) is of the view that there is a "pattern" of risk factors associated with impoverishment. These factors have been found to have a pervasively negative effect on child adaptation. A longitudinal study conducted by Egeland et al (1975) since found that many children living in poverty were functioning very poorly in many ways, and many of them experienced poor quality relationships with their primary caregivers in infancy. Similarly, Erickson, Sroufe and Egeland (1985) discovered that many children who lived in poverty experienced behaviour problems during the pre-school period and subsequently developed antisocial and emotionally dysfunctional behaviour. With respect to their academic achievement, it was also discovered that a high proportion of poverty stricken children performed very poorly at school.

Birch and Gussov (1970) indicated the cyclical nature of impoverished environments which result in poor health, school dropouts and subsequent limited job opportunities, that predicted the pattern of life span development and negative outcomes across multiple spheres of activity.. Poverty is therefore seen as the critical factor in this

disadvantaged cycle, which Birch and Gussov proposed as their "transgenerational model of poverty". In this model, poor maternal health, growth and nutrition, inadequate medical supervision and family planning increase the probability of infant mortality and morbidity, and increase family size, and these in turn trigger a sequence of consequences which link subsequent school failure to unemployment and underemployment, social deprivation and environmental inadequacy. They believe that these enervating conditions can often become transgenerational. However it would be incorrect to generalise that continuities in disadvantaged status are necessarily intergenerational because researchers have also found some children reared in poverty, who were successful in escaping the confines of their parents' low socio-economic status (Garmezy, 1991; Pilling, 1990). However, it is appropriate to assume that the adverse circumstances in which children are reared can diminish their chances of a positive life at a later developmental stage (Pilling, 1990).

Stress and Coping

The Concept of Stress

The new edition of the Concise Oxford Dictionary defines psychological stress as a demand on physical or mental energy; distress caused by this. It is seen as a state which consists of non specific changes manifested in different physiological reactions (Chandler, 1984). Seyle (1956) also perceived it as how the body reacts to demands placed on it. He conceptualised it as a non specific physiological pattern which produces essentially the same responses particularly in the hypertrophy of the adrenal, atrophy of the thymus and lymph glands, and ulceration of the stomach and duodenum. Kuczen (1982) views it as threatening an emotional or physical response to any given situation. But, an intensification or long duration of the response will evidently display the negative aspects of stress (Youngs, 1985).

Similarly, Chandler (1984) defines it as a state of tension emanating from events or situations perceived by the individual as threatening. This emotional tension can function as a motivator as the individual attempts to cope with stress. But Chandler

believes that the very attempt to cope may result in stress responses ranging from health, positive and effective ones to pathological ones that are both ineffective and counterproductive. Consequently, children producing ineffective stress responses will also show behaviour maladaptation which interferes with effective functioning in their immediate environment; whether it is the home, school or community.

Causes of Stress

The child's environments - home, school and community are overwhelmed with stress inducing factors.

One principal cause of stress is disruption in home or family unit due to divorce, separation, violence and the like (Allen and Green, 1988). Wallenstein and Kelly (1980) and Rutter (1981) highlighted the problem of divorce as having stress - inducing effects on children. This is of concern in view of increasing divorce rates in many societies. However, intact families are also not free of risk factors since they may be subject to any of the risk factors noted in section 2. Parenting is an extremely difficult, demanding and complicated task which carries high risk of stress not only for the parents but for the children as well; because a family under stress can induce stress in children (Humphrey, 1984). Parents who are not child-centred may not provide their children the love and support that are so essential in their lives.

Parental pressure on a child to achieve is also a cause of stress. When parents set goals for children that they find difficult to accomplish stress is likely to result. The goals set may be too high for a particular school or home, for children to achieve; or they may be set too low and therefore reinforce a feeling of underachievement in children. This component of stress can develop a sense of fear in children that their goals in life will not be achieved (Humphrey, 1984). Children carry this pressure to achieve into the classroom and this is further compounded by pressure from the teacher to conform (Blom et at, 1986 cited in Allen and Green, 1988: 3). They believe that teachers can increase stress by timing children's performances on specific activities and emphasizing competition (Allen and Green, 1988). Competitive work

can threaten children's self esteem and their sense of self worth, particularly in situations where they cannot respond adequately to the demands of competitive performance. This competitive stress can cause children to be emotionally disturbed particularly if they feel personally threatened by the competition.

Performance before a class is another school anxiety which can induce stress in some children. They become frustrated knowing that they lack self confidence and the ability to cope with a perceived challenge. They feel humiliated and develop a sense of failure. Also it can be very stressful for some children when they get no support, encouragement or praise from adults especially when they believe that they are making an effort at work. Some others are also under excessive pressure knowing that, because of certain biological traits and personal characteristics, they are very 'unlike' their peers.

Humphrey (1984) identified several anxiety conditions in schools which can increase the stress level in children. Some of these are: (1) *Stress and the child in the Educative Process*: which include characteristics such as: anxiety in the learning process, anxiety as internalised fear which is usually aroused by painful memories of past experiences; anxiety in the classroom which interferes with the learning process; test anxiety. (2) *Teachers' Behaviours*: these include emphasis on competition and conditions to promote co-operation; These are conflicting aims and attempts to reconcile the two can be extremely difficult. (3) *Subject Anxiety*: For many children, attending school and performing poorly are considerable sources of stress. Certain subjects such as reading, mathematics and writing are imbued with anxiety and stress, and a feeling of frustration for some children who later develop a mental block towards them. (4) *Test Anxiety*: there is a tendency for children with low socio-economic status to be most anxious when confronted with a test. Thus, a negative relationship exists between low socio-economic status and level of anxiety and this can even contribute to poor test performance.

Rutter (1981) identified other stressors which affect children. These include: (1) hospitalisation: During a period of admission, parent attachment is disrupted and

emotional disturbance may result particularly in a situation where the child is placed in quarantine and does not have the opportunity to form new attachments. Besides separation, the attitude and mental state of parents and hospital procedures and environment can all induce stress in children. (2) The responses of children to the birth of a sibling: It is believed that the birth of a sibling will lead to the dethronement of the first born. Accordingly, the first born is conservative and always reminisce on the good old days when he or she had exclusive possession of the parents. Consequently, the child develops emotional and behavioural problems that are associated with changing patterns in family interactions, mother-child relationship and the mother's mental state (Dunn et al, 1981 cited in Rutter 1981: 332).

Medeiro (1983) pointed out that in many single parent families children have assumed the role and responsibility of the absent father or mother and very often become a confidant to the parent with whom they live. Other children also assume adult roles from a very early age. They are responsible not only for themselves but for the younger siblings and the care of the home as well (Blom et al, 1986 cited in Allen & Green, 1988).

Carol Seefeldt (1984) considers child growth and development as a source of stress due to its great demands for adaptation and functioning on the child. However, it can be argued that every individual needs a certain degree of stress in their life during the normal process of growing up in order to function effectively (Selye, 1980). Besides, taken singly, chronic stress may be transient and is not likely to be of psychiatric risk to children. Each individual has a tolerance level. If the level of stress becomes considerably greater than their capacity to tolerate, then an individual will suffer from emotional stress and its negative consequences.

Responses to Stress

Unlike risk, stress is entirely internal to the individual, although behaviourists see stress as coming from the external environment and not from internal states (Humphrey, 1984). However, it is the individual's experience of external events or

situations that is of concern, and it depends not only on the seriousness of the external threat but also on the individual's ability to cope with it. Thus, individuals with low coping ability when confronted with external threat will experience stress.

It is appropriate to suggest that an objectively high - risk situation may be stressful for some children but not for others. There will therefore be great variation in the degree of stress and children's reactions to it (Allen and Green, 1988). It may turn out that some individuals are vulnerable to any degree or kind of stress by reacting to the slightest external threat (Cohen and Lazarus, 1973). In contrast, there may be others who respond to stress by confidently maintaining a firm control over their environment, by remaining hopeful in distressing situations and by accepting responsibility for their actions (Anthony, 1987).

It is not presumptuous to suggest that the activity levels of children vary when they are under stress. In his stress response model, Chandler (1984) identified four common response patterns to stress typically adopted by four types of children: (1) *The Dependent Child* who is often passive but demanding, lacks independence in several areas of functioning, and frequently 'avoids taking the initiative in learning and social situations'; (2) *The Impulsive Child* who is overactive and is easily excited, displays aggression and hostility, is violent and subject to temper tantrums; (3) *The Passive - Aggressive Child* is most frequently characterised by educational underachievement and is often described as indifferent about his poor performance in school. But besides being uncooperative, the child can also be overly-compliant; (4) *The Repressed Child* is typically withdrawn, reserved, shy, and quiet. There is always a feeling of anxiety which may involve nervousness, worries, fears and overly-sensitive reactions; has difficulty in making decisions.

In his early work on stress, Seyle (1956) closely explored adrenocortical responses to stress and the secretion of corticosteroids. It was these observations of the physiological responses to stress that developed into his concept of the 'general adaptation syndrome'. Basically his argument is that whenever an organism is confronted with a stressor, regardless of what the cause of threat is it mobilises itself

to react. This mobilisation effort, he argues, is directed by the adrenalin gland, which promotes activity of the nervous system. He concludes that prolonged or repeated exposure to stress will produce wear and tear on the system.

The general adaptation syndrome concept consists of three phases. The first is the alarm phase in which the organism mobilises itself to meet the threat. The second is the resistant phase in which the organism makes an attempt to cope with the threat. The third phase is when exhaustion occurs if the organism fails to overcome the threat, and depletes its physiological resources in the process of trying.

Seyle's model, although developed in 1950 has had substantial impact in the field of stress theory and it continues to be felt today. It is still being used to offer a general theory of reactions or responses to a wide variety of stressors. Gal and Lazarus (1975) also supported the model by stating that physiological responses to stress should not be considered as psychological but as indicators of general arousal and mobilisation. They further state that an individual can alter his physiological stress reactions in a given situation just by taking action. This will, consequently affect the perceived appraisal of the situation thereby changing the stress reaction.

Major theories of child development and growth namely the behavioural, cognitive and psychoanalytic theories have provided useful insights and understanding into the normal stress that children must cope with as they grow and develop and into the potential sources of stress and anxiety for young children.

Despite the fact that some individuals experience stress if challenged by risk factors, they may not necessarily display maladaptative behaviour. Due to the presence of protective factors (to be discussed later) many of these individuals are able to cope successfully with stress and become well adapted. In other words, they have achieved resilience.

Coping and Coping Resources

Indeed, the study of stress cannot be separated from the study of coping. It follows logically that in almost every theory of stress, the degree of stressfulness of a particular event is assessed as a function of the individual's ability to cope with that event. Thus, cognitive theories of stress such as Lazarus (1977) proposes describes stress as the outcome of the individual's appraisal of threat relative to his/her appraisal of coping resources. Lazarus & Folkman (1984) also defined coping as "... *the process of managing demands (external and internal) that are appraised as taxing or exceeding the resources of the person*" (p. 283).

This definition of Lazarus & Folkman (1984) encapsulates the four key concepts considered in the coping model proposed by Beresford (1994: 174). They include firstly, coping as "a *process* or ongoing complex interaction between an individual and the environment". Secondly, coping as viewed "in terms of *management* as oppose to mastery". There the individual will take a realistic view of stress and recognise that mastery cannot be achieved with every problem. Thirdly, also included in the definition is the notion of *appraisal*. This is concerned with the individual's appraisal of how phenomena are "perceived, interpreted and cognitively represented in the minds of the individuals" (Magnusson, 1982: 231; cited in Beresford, 1994: 174). Hence, a circumstance is deemed stressful if it is appraised by the individual as such. Beresford (1994) noted that an appraisal of the phenomena can be mediated by both personal and situational factors. Fourthly, coping is also considered as a "*mobilisation of effort*". Folkman et al (1986a: 572; cited in Beresford, 1994: 174) noted the inclusion of both "cognitive and behavioural efforts to manage (reduce, minimise, master or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources".

With respect to theories of coping, Gunnar et al (1989) specifically noted that in nearly all coping theories two basic orientations or modes can be identified. They can be summarised as cognitive and emotional activity organised around either dealing

with or avoiding stress; both of which have their costs and benefits. According to Gunnar et al (1989), avoidant strategies are beneficial because they reduce stress thereby preventing its crippling effects. Their costs however include interfering with the appropriate coping actions, and in the extreme, rendering the individual incapable of integrating or learning from the stressful experience. In contrast, Gunnar et al (1989) claimed that the approach strategy can be beneficial because they can in many instances lead directly to appropriate actions. Nonetheless, they believe that their costs would include increased stress, and in the extreme, could result in maladaptive behaviour. Therefore, it can be assumed that the process of coping mediates the effects of stressful circumstances on the well being of an individual (Beresford, 1994).

However, Roth and Cohen (1986) indicated that while individuals may differ in the extent to which they organise their coping around avoidance and approach strategies, in many situations both modes or orientations are essential for effective coping. It must be noted that in effective coping, both modes may vary in their primacy across time. On the basis of these arguments, it may be useful to utilise the avoidance strategies in the short run as they allow the individual to gradually deal with stressors without becoming emotionally and physically overwhelmed. In the long run, approach strategies may become necessary in removing or managing the objective effects of stressors (Gunnar et al, 1989). Nevertheless, whatever strategy the individual decides to use will be determined by the availability of coping resources which can also affect how the event or situation is appraised. In light of this, coping needs to be considered as a process extending over long periods of time with available resources, because some forms of psychosocial stress do not constitute short-term stimulus.

However, although it is important to know what coping strategies a person can use to mediate the emotional and physiological reactions to stressful events, other aspects which contribute to the process of coping must be considered as well. Thus, it would be incorrect to assume that with the outcomes which follow stressful events the only source of differences is concerned with the strategies or tactics used by the individual

to deal with the challenges implicit in the stressful events (Rutter, 1981). Assistance from others may also help to reduce stress for the individual. However, individual's characteristics and personal qualities notably intelligence, cognitive skills, internal locus of control, genetic factors and temperament are resources that can help to increase an individual's coping capacity.

Coping resources can therefore be linked to vulnerability because a child's vulnerability to the effects of stressful situations can be mediated by the availability of coping resources (Beresford, 1994). He further claims that if the coping resources are not available or the child does not have access to a particular resource, then the child's vulnerability to stress is increased. On the other hand, if resources are available then the child becomes less vulnerable and more stress resistant, and can therefore cope with the adverse effects of stress. Beresford (1994) views stress and vulnerability as "*a vicious circle, in which stress depletes coping resources and increases vulnerability*" (p. 175).

Protective Factors

The Concept of Protective Factors

Studies of children at risk who succeed against the odds provide information about protective factors in the child and the caregiving environment that promote resilience (Werner, 1994). Therefore, the first objective is to clarify the concept of protective factors.

Masten, Best and Garmezy (1991) define a 'protective factor' as a moderator of stress or risk situation which enables an individual to adapt more successfully than would be the case if the protective factor (s) were not present. Rutter (1990) and Brown and Harris (1978) differ from this view by limiting the concept to only situations in which a factor increases adaptation in the presence of a risk variable but is ineffective or less effective on low risk individuals. In short, for Rutter, there needs to be an interaction effect. Like Masten et al (1990), Grossman et al (1992) believe that

protective factors are characteristics in the individual's world which will mitigate against the potential development of psychopathology despite the presence of risk factors. They are of the view that protective factors will lessen the impact of adversity and spare some high risk individuals from its potentially deleterious effects.

Conrad and Hammen (1993) reconcile the two views by using the concept 'resource factor' for positive factors which benefit both high and low risk children but reserve 'protective factors 'to those which operate only in situations of high risk. According to Lewis et al (1988) a resource factor could be considered as the antithesis of a risk factor and does not necessarily have to interact with risk level or stress to produce positive outcomes. Thus, although resource factors may be beneficial to high and low risk children, protective factors, are uniquely related to conditions of high risk.

The briefing factors also protect children from the negative effects of adverse circumstances. The concept of "briefing" relates to the stress x support interaction whereby the social resources or support factors "buffer" the stressful effects. The "buffering model" proposed by Cohen and Wills (1985) was used to determine whether the positive correlation between social support and well being was attributable to a process of support protecting individuals from the potentially adverse effects of stressful events and circumstances. The buffering model suggests that "*support buffers (protects) persons from the potentially pathogenic influence of stressful events*" (Cohen and Wills, 1985: 310). However, the model proposes that support can be related to well - being and/or adaptation only in persons experiencing stress. An alternative model is termed the "main - effect" model where the social resources have a beneficial effect irrespective of individuals level of stress.

The Search for Protective Factors

An expanding literature on the studies of risk and resilience has focused on the phenomenon of the resilient child who displays good adaptational skills despite exposure to significant risk factors (Cowen and Work, 1988; Grossman et al, 1992). The search (a very complex one) is now on for the effects of protective factors

specific to children who grow up in deprivation and poverty stricken environments. Originally, the focus of research was specifically on clinically high risk children, but increasingly researchers have turned their attention to children who are at high risk of maladaptation, psychopathology, and educational failure due to their social or family circumstances (e.g. Block and Block, 1980; Gandara, 1982; Garmezy et al, 1984; Murphy and Moriarty, 1976; Rutter, 1979). These studies of children who were reared under risk circumstances, were conducted principally in an endeavour to differentiate between those who developed into competent adults and those who collapse or go astray (Pines, 1984). They searched for factors that mitigated the potential negative effects of the predictive risk factors which increase the probability of maladaptive behaviour from childhood to adolescence (Morrison, 1978; Rutter, 1977; West and Farrington, 1973).

To give further insights into the understanding of protective factors, some other researchers went into war torn countries like Ireland, Israel and El Salvador to study children who were exposed to the severe traumas of war and their effects which included becoming orphans through the tragic death of parents who, in some cases, were placed in concentration camps. Yet, in spite of these chronically stressful circumstances, the research revealed a great degree of resilience among some members of their samples (Fraser, 1974; Moskovitz 1983; Rosenblatt, 1983).

Categories of Protective Factors

There is evidence from the work of these researchers to suggest that resilient children who underwent long periods of intense psychological stress possess great psychological strengths. They also have present in their lives protective factors which can be divided into three broad categories. As suggested by Garmezy (1985) and Grossman et al, (1992) these categories include: 1) individual or personality dispositions such as positive temperament (Rutter, 1979; Werner and Smith, 1982); humour (Masten, 1982); high self esteem (Garmezy, 1983; 1985; Murphy and Moriarty, 1976; Rutter, 1979; Werner and Smith, 1982); internal locus of control (Anthony, 1987; Garmezy, 1987. Grossman et al, 1992; Luthar, 1991; Werner and

Smith, 1982; Werner, 1994) good problem solving ability (Masten, 1989; Werner, 1994) good intelligence (Garmezy, 1984; Masten et al, 1988); faith (Pilling, 1990; Werner and Smith 1984); 2) familial or a supportive family milieu which included: absence of family discord (Garmezy, 1987; Rutter, 1987; Werner and Smith, 1982); family cohesion (Felner et al, 1985); competent parenting (Masten et al, 1988) a good relationship with at least one parent or primary caregiver (Campbell, 1987; Rutter, 1979, Werner and Smith, 1982); parental support, rule setting and respect for individuality (Werner and Smith, 1982) early attachment (Anthony, 1974; Werner and Smith, 1982); 3) social environment or an external support system which reinforces the coping capacity of children and strengthen them by inculcating good, sound values. This included: the socialising influence of a positive school environment (Rutter 1983; Rutter et al, 1979; Rutter and Quinton, 1984); involvement in religious activities (Bradford, 1994; McGeady, 1984; Werner, 1990); a significant other or mentor outside the family (Garmezy 1981; 1983; Rutter 1979; Werner and Smith 1982); positive socialising influence of peers (Wallerstein and Kelly, 1982).

Despite the fact that researchers in their search for protective factors, studied different groups of children under different circumstances using different variables, there seem to have been a few strong leads with regard to the commonalities in the characteristics of resilient children and the protective elements in their immediate environments. But research is still in its infancy, and the numbers worked with so far are still too insignificant for generalisations to be made. Therefore, all findings will have to be treated as preliminary or tentative. Besides, there are still many unanswered questions and a distinct formula for the outcome of resilience is yet to materialise. The search is a formidable one; Garmezy (1985) concludes that there is no single source or even a multiple of sources to which one can turn.

However, there seems to be some degree of gratification in the search for clues to resilience for the findings of diverse studies show some conformity, and clearly reveal the effective manner by which some high risk children display good coping abilities when confronted with adversities and stressful situations. Nonetheless, Garmezy (1985) argues that coping taken singly is insufficient to provide clues to protective

factors. He believes that in addition to identifying the children who cope successfully under stressful conditions, researchers need to search for the correlational factors, processes or mechanisms that also contribute to their adaptive behaviours. It is hoped however, that this procedure will satisfactorily identify the protective factors implicated in resilience.

What is encouraging as a consequence of research findings and their implications is the development of a better perspective on how to intervene in the lives of vulnerable and high risk children in an endeavour to aid them towards normal development despite the presence and persistence of the adverse circumstances and stressful events in their lives. An intervention which will propel high risk children towards achieving resilience.

Conceptualizing Resilience

> *For those of us who work with children, especially seriously traumatized children and adolescents, there is no more attractive concept than resilience. (McGready, 1994:3)*

"Whenever vulnerability or risk was studied prospectively or conceptualized in the context of normal development, ideas about resilience followed in the wake of observed differences in the quality of adaptation."(Masten, 1989: 268).

Resilience is not absolute (Gardiner, 1994), neither is it fixed (Rutter, 1987), nor does it assume any absolute invulnerability (Losel, 1994); but arguably assumes relative immunity to stressful situations and circumstances. It is a phenomenon which Losel (1994) and Anthony (1987) believe recaptures old human mythical tales of invulnerable heroes like Achilles and Hercules.

The concept of resilience was suggested by developmental psychopathologists (Fonagy et al, 1994) to describe how children, who have very stressful lives and are at risk of behaviour maladaptation are able to rise above their misfortune and become healthy and happy adults (Menvielle, 1994). The concept, Rutter (1990) believes is not

concerned singularly with genetic dispositions, but particularly in protective or ameliorative factors, that arise from the complexity of nature - nurture and person - situations interactions. Osborn, observes that resilience is *"a generic concept which refers to a wide range of different risk factors and competency outcomes" (1994: 12).*

However, as a subject of systematic research the concept of resilience is relatively new. It is easy to understand and identify with, but it is almost impossible to define (Osborn, 1994; Vanistendael, 1994). Consequently, resilience has been variably defined by different researchers across studies; but in spite of the definitional diversities, much has been learnt about the factors that mediate the relation between adversity and positive child adaptation (Egeland, Carlson and Sroufe, 1993). There is also a better understanding of the complex issues of risk and protective factors, and the possible determinants and predictors of both adaptive and maladaptive behaviour.

The concept of resilience is seen by Losel (1994), not as a fixed quality, but as an attribute which can vary across time and circumstances. He further observes that it is the consequence of a sensitive balance between risk and protective factors. These protective factors, he believes, may either be inherent in the individual (personal resources) or they may derive from the environment (social resources). Hiew (1994) also supports that point of view and further states that to understand how these personal and social protective factors develop resilience in children, one has to understand the role of such socializing functions as the family, school, peers and community and how their influences could modify the negative impact of risk factors on the growth and development of children.

Resilience was described by Masten, Best and Garmezy as *"a process, capacity or outcome of successful adaptation despite challenging or threatening circumstances" (1990: 426).* This implies that resilience is the capacity for successful adaptation and production of good outcomes, positive functioning and competence despite high risk status, chronic stress or following prolonged or severe trauma.

With respect to prerequisites for resilience Garmezy (1983) considered the manifestation of the individual's competence in social, school and cognitive realms as being essential. He is of the opinion that the search for an explanation of resilience is in effect a search for the antecedents or components of this competence. It follows then from Garmezy's explanation that resilience is comparable to competence, and any conceptualization of resilience should consider particular definitions of competence and also vulnerability. Similarly, Osborn (1990) dichotomized resilience when he defined it in terms of two concepts; vulnerability and competence. According to him children who are vulnerable to an adverse outcome yet can achieve competence are "resilient". Thus resilience means for him achieving high levels of competence against the odds. Egeland, et al (1993) also describe resilience, as the development of competence despite severe or pervasive adversity. Murphy confirms the similarity between resilience and competence and states that *"like competence and adaptation as outcomes of coping resilience is an evaluative concept, not a unitary trait" (1987: 101).*

Rutter (1985) conceptualized resilience similarly to Masten et al (1990) and Garmezy (1993) but accentuated more the individual's sense of self. His definition was three fold:

> *firstly, a sense of self esteem and self confidence, secondly, a belief in one's own self efficacy and ability to deal with change and adaptation; thirdly, a repertoire of social problem - solving approaches (p. 607).*

Block and Block (1980) used the psychoanalytist's view to look inward at the individual's ego and conceptualized resilience as one's ability to flexibly adapt with a great deal of elasticity to changing circumstances. This implies "ego resiliency" and the child's ability to be able to cope with stressful situations. Using this view, one can therefore equate resilience with "stress-resistance".

However, the proponents of modern developmental psychopathology lend support to the interactional or transactional model of resilience which is based on the assumption that the self and other personal characteristics are not entirely components of the inner

being but rather a manifestation of social interactions. This implies that resilience can be viewed as a process.

Gardinier (1994) is of the view that resilience is a result, a consequence of an interaction between the individual and his/her direct environment. But for this point of view to become factual, it is essential to acquire a knowledge of the contributing factors that promote resilience and utilize them through social intervention strategies.

Egeland, et al (1993) view resilience in terms of a transactional process within an organisational developmental framework. They conceptualise resilience not as a 'childhood given', but as a capacity that develops over time in the context of person - environment interactions.

In their longitudinal study of Kauai children, Werner and Smith (1982) conceptualized resilience as "the capacity to effectively cope with the internal stress of their vulnerabilities (such as liable pattern of autonomic reactivity, developmental imbalances, and unusual sensitivities) and external stress (such as illness, major loses and dissolution of the family") (p. 4).

Similarly, Rutter (1979) also views resilience as being evident in individuals able to overcome adversity, survive stressful situations and who can rise above the tides of disadvantaged circumstances. In other words, Rutter believes that resilience delineates individual variation in the manner by which individuals respond to the factors of risk, stress and adversity. He sees resilience as a protective mechanism that modifies the individual's response to risk situations and operating at critical points during the developmental process, rather than being a permanent attribute in the individual. Murphy (1987) also stipulates that the potentialities for resilience are related to the state of the child and the level of equilibrium in the different developmental stages. This researcher is of the view that the critical developmental stages in the life cycle are especially vulnerable to emotional and behaviour disturbances that remain constant in the child's life, and from which he/she does not recover quickly. This view however, is not widely endorsed.

Luthar (1991) argues that if maladjustment of some sort is in fact inevitable when confronted with adversities, then it might be appropriate to consider a qualified definition of resilience, where it simply represents the least detrimental of all the causes of maladaptation. Luthar also posits that whilst some youngsters confronted with stressful situations react with emotional distress as well as behavioural difficulties, others, even though depressed and anxious, are able to function successfully. This innate ability to be able to function under stress and showing no signs of behaviour maladaptions is what Pilling (1990) also considers to be resilience.

The concept of resilience is a phenomenon which seeks to explain the unexplainable, particularly the reason why certain children do not seem to have the expected disorders when confronted with poverty and other adverse socio-cultural factors. The physical and social environment in which resilient children live compared with their advantaged peers are, by definition more dangerous and offer limited opportunities for them to cope with the stressful life events to which they are constantly exposed. Such conditions can have negative effects on their physical and mental status and put them at risk of psychopathology, behaviour maladaptation and other forms of disorder, and most particularly educational failure because they are less exposed to educational role models and educational materials.

The diversity of definitions, descriptions and conceptualizations of the concept of resilience above can be summarised as: *"Resilience is <u>normal</u> development under difficult conditions" (Fonagy et al, 1994: 233).*

Theoretical Perspectives and Models of Resilience

> *In order to put empirical findings to work we need adequate theoretical models to organise them. (Fonagy et al, 1994: 233)*

Until recently, empirical studies of resilience in children were largely atheoretical (Fonagy et al, 1994). As a consequence, it was impossible to practically implement the findings of well designed studies because of the inability to place them within a

meaningful theoretical framework (Aber and Allen, 1987). But the recent emergence of different theoretical perspectives and models associated with the study of resilience, should increase the understanding of the underlying processes and mechanisms that promote stress resistance in children.

Until recently risk researchers work was "dominated by a disease model, concerned themselves primarily with symptoms, classification, prognosis, treatments, and risk factors" (Masten, 1989). According to Masten

> *a transformation is now taking place in the theoretical conceptualizations and approaches to understanding the development of psychopathology. The current interest in resilience is a marker of this transformation." (1989: 261).*

Garmezy (1986), who originally was more inclined toward the classical model has deviated his investigative approach from the illness or pathology model, and gravitated toward a model based more on health than illness. One of the principal advocates of this **health model**, Garmezy recently recognised the importance of a distinct, definitive conceptualisation of 'normal' or 'health' in order to effectively study deviations in behaviour and abnormality.

This model which focuses on health related processes is characterised by the ability of some children and young adults to overcome the adversities of life despite the risk of psychopathology, psychiatric disorders and deprivations resulting from chronic poverty. But in order to achieve these positive outcomes there must be present certain protective factors to circumvent and compensate for life stressors (Garmezy, 1986).

In contrast to this health model, Egeland et al (1993) and Sroufe (1991) have an inclination towards the **organisational developmental perspective** which is transactional in orientation. It focuses on adaptational processes within the context of adversities which enhance the understanding of 'normal' development and behaviour adaptation.

Cicchetti and Schneider - Rosen (1986) and Sroufe (1979, cited in Egeland et al, 1993) posit that the interaction of genetic, biological, psychological and sociological factors within the context of environmental support are utilized as determinants of developmental outcomes. In accordance with this perspective environmental factors may serve as vulnerability, protective, or risk variables, directly or indirectly influencing behaviour (Egeland et al, 1993).

This developmental approach to the study of resilience incorporates a system of behaviour in which the individual actively participates. Thus, it can be argued, that experiences acquired in the early developmental stages can be critical in organising later experiences (Egeland et al, 1993).

Waters and Sroufe (1983) support the view that within an organisational developmental framework resilience can be seen as the ability to successfully use internal and external resources to resolve stage salient developmental adaptations. Using this developmental perspective as a model to focus on the processes of adaptation in the face of adversities, Egeland et al, conducted a longitudinal study of high risk children and families since 1975. They discovered that emotionally responsive caregiving mediates the negative effects of high risk environments and promotes positive changes for children who have experienced poverty, family stress and maltreatment. Thus, quality care giving in particular risk situations may serve as protective factors buffering the negative effects of the risk factors (Rutter, 1979).

Using an organisational developmental perspective Bowlby (1982) also portrayed the protective function of good quality caregiving. On a developmental basis, these protective functions may have positive influences on later behavioural adaptation (Masten et al, 1990). Thus, it is imperative that an affective attachment relationship is established during the first year of a child's life and effective autonomous functioning during the second (Egeland et al, 1993).

The proponents of the organisational developmental perspective strongly believe that the early experiences of the child will greatly influence his/her later functioning. One

of the principal proponents of this view, Egeland et al (1993) believe it can provide a useful model for conceptualising the complex relationships that exist among risk and protective mechanisms, previous adaptation, and resilience. A study of resilience from this developmental point of view will require the delineation of mechanisms involved in both adaptive and maladaptive behaviours. Such an approach Rutter (1987) believes has distinct implications for the development of effective strategies for prevention and intervention.

Another version of the **transactional model** suggests that a strong positive relationship between mother and child from a very early age can result in a sequence of positive interactions over time, and consequently produce desirable behaviour in an upward spiral (Wertheim, 1978). Conversely, the antithesis will occur if early relationship between mother and child is characterised by a sequence of negative interactions, which produces undesirable behaviour. Hence, the importance of significant others (e.g. mother or other primary caregiver) in the very early years of the child's life must be emphasised.

The transactional model has further implications. Sameroff and Chandler (1975) see the model as beginning with a mother stressed emotionally, economically and socially, who gives birth to a child to whom these stresses are communicated producing within it a difficult temperament. They believe that the negative characteristics acquired by the child will provide little reinforcement for the parents and unless they are free from other social stresses, their child rearing practices will be adversely affected. The child in turn confronted with poor parenting from a very early age does little to elicit good quality caretaking from the parents. And so the sequence progresses, with a reciprocal process which will result in negative developmental outcomes and maladjustments.

Horowitz (1987), on the other hand, advocates the **structural behavioural model** of development. This perspective proposes that an individual's adequacy of development in a particular behavioural domain is the consequence of organismic factors which function in conjunction with environmental factors to facilitate or hinder development

at any given period of the life cycle (Horowitz, 1987; Werner, 1994). The model suggests that resilience or vulnerability can change at different developmental stages (childhood, adolescence, adulthood) in the presence of adverse environmental conditions. However, some children are known to have consistently used their constitutional resources to help them successfully overcome the adverse effects of stressful events. Others have not been so fortunate. Nevertheless, the possibility exists for a child who has experienced an excessive stressful childhood to have his/her place changed on the continuum from vulnerability to resiliency at the onset of adolescence.

Werner (1993) used this structural behavioural model to interpret her data from the Kauai longitudinal study. She discovered that some children consistently utilised personal and social resources to assist them successfully overcome adversities. Some others, after a troubled adolescence went through a reorganisational period which eventually changed in the later developmental stage to resilience. Conversely, children who experienced resilience in their childhood, but due to accumulation of risk factors or stressors this childhood resilience can change to vulnerability in a later developmental period. It can be assumed then, that the constitutional characteristics of the individual and the quality of caretaking could determine the quality of adaptation in each developmental phase. Thus, the personal qualities of the primary caregiver can put children at risk because of their method of interacting which may influence among many things, how the child develops trust, socialises and copes with his immediate environment.

Unlike the structural behavioural model, Scarr and McCarney (1983) advocated the **theory of genotype-environment effects**, which is characterised by the manner in which individuals structure their own environment, and which environments are experienced by them. They proposed three types of genotype-environment effects on human development; namely:

- *a <u>passive</u> kind*: the effects of which emanate from environments created by the biological parents;

- *an <u>evocative</u> kind*: the effects emerge through responses elicited by the individual from others such as teachers, ministers of religion, parents, relatives and peers. These responses are frequently based on the individual's temperament, dispositional attributes, personality, physical characteristic and intelligence.

- *an <u>active</u> kind*: the effects stems from different environments selected by the individual. For example, a child may be placed in an environment with few environmental assets handed to him/her, and had to rely on himself/herself to figure out which environment should be actively acquired by him/her in order to gain substantial compensation.

In view of this theoretical perspective the feasibility of shifting from one genotype - environment effects to the other can be argued. For example, a child who lives in a stressful home where family discord is prevalent might seek solace and friendship in a less stressful and more stimulating extra familial environment, like the church or school.

The proponents of this theory of environmental effects on human development argue that genetic differences in individuals prompt differences in which environments are experienced by them and effects they may have. Using this point of view, the genotype, in both its specificity and individual variability, plays a pivotal role in determining the effects of the environment on development, because it determines the individual's responsiveness to environmental opportunities (Scarr and McCarney, 1983).

With respect to human development, the theory realises the significant function of the dichotomy of nature and nurture in development. But cognizance of the role of genes in helping to formulate experience must not be ignored. It is noteworthy that the

organised ability of an individual to experience his/her surroundings on the basis of his/her genes composition can be altered with development, and that the outcomes will be varied with each individual. It can be assumed then, that genotype is significantly the driving force behind development. However, Scarr and McCarney (1983) discovered that the differences among people can arise from both genetic and environmental differences. They proposed that the process by which these differences arise is better described as genotype-environment effects. (Werner's (1993) findings of the Kauai longitudinal study, empirically supported this theory of genotype-environment effects.)

Another theoretical perspective put forward is based on the **genetics theory.** It is the antithesis of environmental theories although there may be hereditary- environmental implications.

The proponents of the genetic theory are of the view that only some children who grow up with similar familial risk will develop psychopathology. The theory asserts that the outcomes will be different even amongst children of the same family. That is, some children at risk of psychopathology remain unaffected not because they are resilient, but because they do not possess the genes that are responsible for genetic risk; such high risk genes which will heighten the occurrence of childhood psychiatric disorders such as autism, attention deficit hyperactivity, conduct disorder, depression, and anxiety disorders (Rutter et al, 1990).

Rende and Plomin (1993), the main advocates of this theory, view resilience from this genetic perspective as the extent to which children who are at risk genetically are not affected. The child may be at risk genetically, that is, have genetic predispositions to psychopathology yet do not develop psychosis because of environmental protective factors. On the other hand, the child may be at risk due to environmental adversities but be genetically resilient. It is also known that people who carry high risk genes also do not develop the disease for which they are at risk. For example, most children of schizophrenic parents do not develop schizophrenia. One can therefore assume that such negative outcomes which are frequently associated with

psychopathology can be mediated by genetic influences. Thus, although genetic influences constitute a significant risk they can also be used to circumvent the negative impact of environmental risk factors.

Intelligence has been studied extensively in resilience research. It has been recognised that this dispositional attribute may generate protective functions within the child, and may reflect a characteristic influenced by genetic factors (Luthar & Zigler, 1991). Thus, intellectual ability may act as a protective factor which may modify the effects of stress, thereby protecting children faced with adverse circumstances from experiencing negative outcomes. However, Rende and Plomin consider intelligence as a potential protective factor with *"heritable influences that may promote resilience"* (1993: 535). This is a reminder that *"genetic influences may directly contribute to adaptive development despite the presence of environmental risk factors"* (Rende & Plomin, 1993: 535). It would be interesting to examine the role of intellectual ability under different environmental contexts, to identify the various ways in which it may lead to different outcomes.

Another aspect of this theory relates to the operational influences on non-shared environmental factors on children in the same high risk families. There is good evidence to show the significant role of genetic factors in determining individual differences in personality, characteristics and intelligence (Shields, 1977). But this view point must be considered cautiously, because a great deal can be done to influence development by manipulating the environment. Besides, it can be argued that one of the ways in which genetic factors operate is through an influence on responsiveness to environmental stresses (Rutter et al, 1990). They emphasise that with some aspects of development, traumatic experiences within the environment are most damaging to genetically vulnerable individuals. An indication of this interaction between genetic factors and environmental influences was clearly shown in studies of adopted and fostered children by Hutchings and Mednick (1974). From their findings on assessing the rate of criminality in children, an assumption was made that environmental factors seem to have the greatest impact on genetically vulnerable children.

The plausibility of the genetics theory can be argued. Whereas an individual's family history can be predicated to psychopathology, researchers have not yet been able to discern specifically which of the family members will become affected and why; and whether the risk created is due to genes, environment or a combination of both. A similar position holds true for individuals not affected by psychopathology. Was this made possible by genes, environmental influences or a combination of the two?

The genetics theory highlights the probable nature of genetic influences on psychopathology and the need to use both genetic and environmental factors to understand resilience. In addition, there is also the theoretical underpinnings of the critical role of non - shared environmental factors in understanding resilience.

But developmental, behavioural, genetics and environmental theories and models are not the only means used to understand resilience. Recently the spiritual perception of resilience was developed. This **theory of spirituality** is symbolized by the religious and spiritual rights of the individual child.

McGeady (1994) is of the opinion that resilience is God's great gift to high risk children whose prognosis looked bleak and who, despite experiencing trauma had the capacity to recover. She believes that

> *God has gifted children with this residue of hope which is like a faint fire that must be fanned into a bright flame so that devastated children, whose trust has been destroyed can once again, <u>trust</u> the adult world enough to want to please them" (McGeady, 1994: 3).*

As this trust is built, McGeady believes that children will experience setbacks or go through negative periods during which the genuineness of the caregiver is tested. But it is during this building process that the manifestation of resilience commences.

Bradford (1994) states that to be resilient the public religious rights of the child as stated in the United Nations Convention on the Rights of the Child (1989, cited in Bradford, 1994: 17) must be met. These include the individual's spiritual rights and

the participative religious rights. To achieve these is to promote resilience in the individual child.

Another assertion of the theory is that in the face of hardships with which many children are confronted, particularly those who live in absolute poverty, the spiritual needs must be met. Such needs include love and security from early attachment or parental bonding, a secure environment and support systems through the encouragement to participate in family and community life, and the affirmation of others. In his support of this declaration, Bradford (1994) argues that the best provision of resilience when confronted with hardships is to have one's broadly spiritual needs properly achieved as a child. But it can be further argued that if this provision is to be met, the society in which the child lives will have to be fully aware of what these spiritual rights are, and endeavour to appropriately fulfil them.

The main proponents of this theoretical perspective see religious practices as helping to develop the spiritual life of the child. It is their belief that a child must be affiliated to a denominational organisation in accordance with his/her cultural heritage, in order to relate with people with similar religious beliefs and ideologies.

Bradford (1994) sees this religious involvement as a means to foster a child's resilience in high risk situations. But most importantly, it can be argued that just by being a member of a close and healthy religious community, a child can take advantage of the positive effects which can increase resilience. Such effects as those which emanate from support systems (e.g. the ministers of the church and the parishioners); having a distinct focus on life and how to approach it, having a sense of commitment and contentment, hope and gratification which are consequences of the good relationships which exist among religious community members; and drawing support on a set of values and beliefs transcendent from 'something' they believe is bigger than themselves, which will give a sense of meaning and purpose to their lives.

In support of this view point McGready (1994) purports that a truly supportive religious community can compensate in several ways for a lack of a sense of belonging in disturbed families, by becoming the primary source of rootedness most essential in achieving this sense of belongingness. Children, Fahim (1994) believes, are able to cope with stressful life events knowing that there are sources in their lives to support them. Garmezy (1981), Rutter (1979) and Werner (1984) also contributed to this view by proposing that children who are vulnerable need emotional support from powerful role models outside the immediate family circle. Those most frequently encountered in studies of resilient children are a minister of the church, a favourite teacher or a good neighbour. For Werner (1984) this is essential, for there seems to be a special need to strengthen such support systems in the lives of children and their families who are most vulnerable because they lack some of the social bonds essential to buffer the effects of stress.

Another assertion of the spiritual perspective emphasises the importance of <u>faith</u>. Fahim (1994) professes that it is an important source of stability through which children can find the security which is lacking in their lives.

> *By having faith and having hope, I know that there is a light at the end of the tunnel and that there is a better way to live.*
>
> *(Laura J Hilton, 1994: 45)*

Osborn (1994) too believes that having faith is likely to assist families to come to terms with and have the ability to cope with social adversities. Werner (1984) sees faith as the central component in the lives of resilient children and their capacity to effectively cope with stressful situations. This feeling of confidence or faith created a sense of expectancy in resilient children that "all will be well" and that "nothing is impossible to achieve". Such faith, Werner believes, can be developed and sustained even under the most adverse circumstances. All children need is people to make life meaningful for them and to give them a reason to care. Thus Pilling (1990) conjectured that adherence to the church can provide some degree of sustenance for mainstream aspirations.

The following tenets are applicable to the theory of spirituality: love, faith, security, encouragement from others, making community contributions and responding to new experiences. The main proponents of this theoretical perspective believe that religious values inculcated in children can be an added growth factor, and the preparedness for resilience as an integral provision of their discipleship. But the discouraging aspect of the spiritual perspective is the child's inability to cope when put under too much stress.

The **cognitive theories** of Jean Piaget (1963) stipulated that children's behaviour is a reflection of how they understand the situation. One can assume then that a child will respond to a specific situation in a particular way because of how he/she thinks about it. Thus, responses to stress are the consequences of how a child understands the situation. This ability to use cognitive structures and processes to think is created by the child in an endeavour to achieve equilibration with respect to understand his/her environment.

Because children are in control of their own environment due to their ability to think, they become autonomous (Seedeldt, 1984). According to her the environment provides the opportunities for children to create their own internal cognitive structures, but argues that it is the cognitive structures and the child that control thinking and their behaviour, not the environment. This argument has great theoretical implications. The fact that children are able to think, requires them to make their choices, have the capability to control fear and anxiety, and to be able to overcome the stressful situations in their environment. However, the cognitive theory suggests that children need to be autonomous and given the opportunity to think and learn for themselves in order to cope and adjust to the stressful experiences encountered at home, in school and in the community in which they live. But in spite of the need for autonomy, children also need adults to understand their thought processes and provide them with the support and experiences they need in their attempt to understand reality vis a vis the incongruencies of their own thinking. These thought processes and parental support will help to increase children's chances of resilience.

Behaviour **psychoanalytic theory** views human behaviour as being determined from within and is directed by internal drives within the individual. According to psychoanalytic theory children develop mental structures which allow them to adapt to their own environment and to gain control of their instinctual drives (Humphrey, 1984).

The theoretical implication is that children's behaviour is directed by need or an inner drive which must be gratified; the fulfilment or non-fulfilment of which can be very stressful. During the "drive gratification process" whereby the drive is not fulfilled, the child is unable to exercise control over his/her environment and consequently experiences anxiety or stress. This view receives support from Rohwer et al (1974) who posit that the interplay between the tension of an unfulfilled drive and the energy expended in the release of that drive can be defined as a producer of anxiety or stress. It can be argued however, that as a consequence of the excessive stress or anxiety which a child experiences, defense mechanisms which consist of cognitive structures and processes can develop to protect the child through this stressful experience.

The cognitive structures developed by the child include problem solving ability, more divergent thinking, perception, better personal awareness and social comprehension (Masten, 1986; Pellegrini, 1985). These structures are considered as the ego functions or cognitive qualities associated with resilient or competent children. The ego functions enhance the coping skills of resilient children, increase their autonomy, and help give them control of their instinctual drives and their own environment. Thus, this scope of "developmental consciousness" is positively related to the child's emotional, social, and intellectual development.

Unlike the psychoanalytic theorist, the behaviourist sees stress as the response to external events or conditions. Behavioural theories suggest behaviour is directed not by the internal cognition processes or instinctual drives as proposed by the cognitive and psychoanalytic theories, but by specific stimuli from the environment as well as an accumulation of experiences from past environmental conditions. Thus any coping behaviour to deal with stressful situations can be learned through experiences

reinforced or ignored; a view which is not entirely accepted by Bandura (1967) who believes that the learning process is much more complicated than that.

As put forward by the behaviourist, the phenomenon of resilience demands that there be a balance between stressful life events and protective factors in a child's environment. Rutter (1979) therefore believes that it is impossible for children to adapt when they are overwhelmed by a multiplicity of experiences of illness and poverty. In support of this argument Werner (1984) used the balance theory of behaviour to explain that a shifting balance towards stressful events can increase the vulnerability of children. In contrast, if the balance is shifted towards the protective factors then their resilience will be enhanced. This balance she believes can be altered with each developmental stage and with the sex of the child. However, it seems difficult for children to develop and sustain faith if they are under too much stress, deprived of human spirituality as a consequence of parents' ignorance of the spiritual needs and confronted by economic poverty and chronic environmental problems.

Conclusions: The Study of Resilience and its Implications

The different conceptualisations, theoretical perspectives and associated factors outlined above, have made a significant contribution to the understanding of resilience. They provide explanations for and operationalise resilience in terms of the effects of the factors which produce positive outcomes in resilient children. It is evident from the conceptualisations given that resilience is a phenomenon which involves the interaction of a multiplicity of factors and processes. It is an evaluative concept which is continuous over time. It can also be summarised as a positive outcome which is achieved after exposure to the adversities of high risk situation and stress.

The theoretical perspectives discussed made several suggestions ranging from genetic and environmental contributions to resilience to the spirituality dimension. The importance of the socialisation process, the kind of environment in which the child

is integrated through patterns of interaction, and the effects of genetic factors on different developmental stages are all issues relating to the resilience construct.

Research on the associated factors of resilience show the negative impact of risk and stress, and the presence of protective factors in the recovery process. Risk is the level of probability that given factors will have negative effects on an individual. These risk factors are conditions which are known to increase the risk of given outcomes occurring. They can be internal and of genetic predispositions or external due to pressures, processes and events. Risk factors predict a greater probability of biological, social, emotional and intellectual dysfunction in young children and adolescents.

Stress, in contrast, is experienced by an individual if they feel challenged by a risk factor which poses a problem. It is a complex physiological and biological process which commences with the individual's perception that a risk factor is potentially threatening or challenging. Hence, an objectively similar risk factor may induce different levels of stress in different individuals depending on (a) the degree to which they perceive the risk factor as challenging, (b) the degree to which they can cope with the risk factor, and (c) the presence of any protective or resource factors.

Too much stress and, to a lesser extent probably too little stress leads to behaviour maladaptation of the type associated with the risk factor in question. Resilience is achieved by those who, when exposed to the risk factor, cope successfully, avoid stress and therefore is well adapted. However, resilience in an area of endeavour does not guarantee resilience in other areas. It is tied to a particular risk factor and its defined outcome and refers to individuals who successfully negotiate the challenges imposed by given risk factors. Although a great deal of research has been done on risk and stress, in comparison very little has been done on the protective factors which lessen the impact of risk and stress or protect children against their deleterious effects.

The study of resilience has paid particular attention to socially disadvantaged pre-adolescents and younger children, with a relative paucity of attention to resilience in adolescents (e.g. Hauser et al, 1985; Luthar, 1991; Rutter and Quinton 1984; Werner, 1989). They live in poverty under deteriorating conditions and in dilapidated houses. Their parents may be illiterate, young, abusive, neglectful, or may be drug addicts, alcoholics, psychotics or schizophrenics. The children may be deformed or physically handicapped. Their future prognosis looks bleak. Their assessment is typically dysfunctional particularly in the realms of intelligence and academic achievement, social, emotional and behaviour adaptation. But many of these children did not display the anticipated adverse outcomes but showed signs of good adaptation in comparison to their counterparts who showed symptoms of maladaptation.

Studies of resilience provide insights to an emerging area of developmental psychopathology (Conrad and Hammen, 1993) which Murphy (1987) believes should be related to vulnerability and stress. This author sees the potentialities for resilience as relating to the state of the child and the level of equilibrium. Thus, the dual aspects of resilience begin to surface. Murphy and Moriarty (1976) expressed the dual aspects as vulnerability and coping in children. Werner and Smith's report (1989) 'Vulnerable but Invincible', from their longitudinal study of Kauai children is a similar view.

For some children, whether or not resilience is a permanent characteristic will depend immensely on the frequency of occurrence and intensity of the stressful life events at successive developmental stages. An increase in adverse circumstances in their lives will further increase their vulnerability. Conversely, an increase in the protective factors will intensify their resilience. A child who is resilient at one developmental stage may become non-resilient at another stage of development if an increase in stressful life events or the removal of protective factors create such an imbalance as to amplify the level of vulnerability. The effects of sociological, demographic and biological risk factors, in addition to biopsychosocial pressure from undue stress also contribute to the high risk status of children. In contrast, if an increase in the presence of protective or resource factors outweighs the vulnerability factors in

another developmental stage, then the balance will be favourable towards resilience.

Researchers (e.g. Anthony, 1987; Felsman and Vaillant, 1987; Murphy and Moriarty, 1976) have argued that resilience is not necessarily continuous, but is sometimes interspersed with delays and impediments under certain circumstances. As the study of resilience gains momentum the concept of the resilient child has gradually changed. No child should be perceived as being invincible or entirely resilient (Radke-Yarrow and Brown, 1993). They believe that the child who shows remarkable degrees of success in coping adequately in stressful situations might also experience setbacks and inadequacies at different times and under different circumstances.

Studies of resilience have identified and diversely conceptualised protective, stress and risk factors and have also investigated children's attributes and dispositions, and their total environment. But most research on resilience have not focused specifically on risk. Conrad and Hammen (1993) claim that this has become apparent as a consequence of research conducted on the effects of parental affective disorders on children. Recent studies have reported findings on resilient children who are at risk as a consequence of parental depression or other psychopathology.

Nonetheless, the literature on resilience provides ways to determine serious vulnerability in children in conjunction with the factors strongly associated with good adaptation. It shows how the effects of biological risk factors can interfere with later developmental adaptation; and how socio-cultural factors such as poverty, illiteracy, racism, poor housing and overcrowding which influence behaviour and academic achievement have been underestimated (Honig, 1984). The literature also reveals the dichotomous effects of certain variables such as intelligence and competence (Luthar, 1991) and reaffirms the centrality of the family involvement as being crucial in the lives of high risk children (Grossman et al, 1992). The implication therefore is to continue the search for potential resources in the immediate environment that will help protect individuals from the impact of risk and stress.

The study of resilience provides hope as an integral component (Danieli, 1994; Losel, 1994). It also provides a philosophy for children in which they will acquire the cognitive skills required to explore the philosophical dimensions of their experiences, which will eventually assist in practice of good decision making (Sharp, 1994). This author sees this philosophy of children as an effective way of strengthening resilience; a perception which is concerned with the growth and development, and their "intellectual emotional and social liberation" (p. 41). With respect to hope, Losel (1994: 10) states:

> *The knowledge that, even in adverse circumstances, children can develop into relatively healthy, competent, and contended adults is an important aid for those who work with families, in schools, communities, welfare institutions and Third World Projects. Focusing our attention on people's strengths rather than weaknesses may reduce the threat of self-fulling prophecies and stigmatisations ... Tackling the phenomenon of resilience can provide new heart and a fresh perspective here.*

A great deal has been learnt about resilience and protective factors from studies of a variety of groups with dissimilar problems in a range of countries and social contexts; studies ranging from deprived families on the island of Kauai in Hawaii (Werner and Smith, 1982) and schizophrenic or depressed parents in the United States of America (Garmezy et al, 1985), to high risk children in England (Osborn, 1990; Rutter, 1979), and street children in South America (Felsman and Valliant, 1987). It is noteworthy that there has been no reported study of resilience in the West Indies, nor in many other places.

It is not presumptuous to conclude that our knowledge of the conditions, mechanisms and underlying developmental processes and outcomes is far from being conclusive. The large amount of variance in the outcomes of resilience still remains to be explained. There is need for further research on protective factors such as dispositional attributes, biological and environmental conditions and positive events implicated in resilience that modify the effects of deviant behaviour or pathology (Garmezy et al, 1984). Little is known about the influences that stimulate academic

achievement in children with limited social and economic resources (Gandara, 1982). Researchers are yet to come up with a formula for producing resilience. They indicate factors that seem to offer some degree of protection, but it can be argued that though these factors may be necessary, they may not be sufficient to produce resilience. So, the work on resilience has just begun. The search is on for the roots of resilience (Werner & Smith, 1982).

In 1979 Rutter prepared an empirical future agenda for developmentalists and psychopathologists when he stated:

> *We are nowhere near the stage when any kind of overall conclusions can be drawn. What is clear, though, is that there is an important issue to investigate. Many children do not succumb to deprivation and it is important that we determine why this is so and what it is that protects them from the hazards they face. (1979: 70)*

Today, fifteen years after this agenda was written, researchers are still searching for the underlying processes and mechanisms that will help explain the attributes of resilience or stress resistance. When this agenda is met and conclusions can be drawn then the study of resilience will have significant implications for intervening in the lives of children who are at high risk of psychopathology, educational failure and other emotional and developmental deficits and dysfunctions. Researchers will then be in a better position to provide definitive answers to the questions: What makes resilient children tick? What kind of environment, families and relationships do they have? Are they different in their innate temperamental characteristics, personal attributes, or genetic composition? Are they conscious of their human spirituality?

Finally, this chapter presents a comprehensive review of resilience with a diversity of existing ideas. Resilience, I believe is neither absolute nor is it a fixed attribute. Rather, it is an evaluative state which is continuous over time, and which shows the capacity of an individual to function well when facing difficult and adverse circumstances in life. Resilience may show up in many different ways, one of which is achieving educational success despite being exposed to stress or adversities which normally carry a high risk of negative outcomes, including educational failure. It is

influenced by the risk factors the individual is exposed to, and his/her ability to cope with the stress induced by them. There is no guarantee that a child who is resilient in one developmental stage will be resilient in the next. A great deal will depend on whether or not there is an increase or decrease in the number of risk factors which he/she encounters in life, and his/her ability to cope with them in the presence of protective factors.

With respect to a theory of resilience my conclusion is that there are many factors contributing to resilience therefore, no single theory seems adequate. Thus, one may ask the question: Can there be a "theory of resilience"? Judging from the discussions on the different theoretical perspectives, one may conclude that there can only be a model of resilience involving risk - competence with a wide range of mitigating factors such as genetic, environmental, personal, and spiritual. However, my model of resilience which is adopted in this study is discussed in the next chapter, and it involves a risk - competence equation.

CHAPTER V

A MODEL OF RESILIENCE AND CONCEPTUAL FRAMEWORK

"The evaluators... were spread throughout all the other groups, each endowed with the special gift of their own group, and each using that gift in a special way". Halcolm's Evaluation Oracles (cited in Patton, 1990)

Introduction

It was argued in Chapter IV that the concept of resilience has been developed by theorists in the field of psychopathology, to describe those who experience chronic stress yet avoid the adverse developmental consequences that often result. However, no satisfactory general model of resilience has so far emerged that can be applied to all instances of resilience. In this chapter, therefore, a model of resilience is developed which is applicable to the issue of educational resilience in St. Lucia.

Model of Resilience

The field of developmental psychopathology provides an organisational framework which is equally applicable to both normal and atypical development (Zigler, 1989), and is unique in its emphasis in recognizing the importance of the interplay between adaptive and maladaptive development (Cicchetti, 1984; Rutter, 1984).

In keeping with the sociological perspective, children exposed to stress which increases the risk of an adverse outcome are said to be "vulnerable" to that outcome. Therefore, resilience is defined using two concepts - vulnerability and competence. Thus, children who are vulnerable to an adverse outcome yet achieve competence are "resilient". ("Competence" was first suggested as a generic concept in the context of resilience by Norman Garmezy and his colleagues to refer to adaptive or successful outcomes e.g. Garmezy et al., 1984. In Rutter's (1981) terms, children who "do well" in some sense despite having experienced stress, can be said to have achieved competence.) It follows from this that any explanation or model of resilience has to depend on the particular measures of vulnerability and competence used (Osborn, 1990).

In the present study competence is defined in terms of educational success, and vulnerability in terms of adverse socio-economic circumstances of families of disadvantaged children which are known to increase the risk of educational failure. Thus, "educationally resilient" children are those who, despite being at risk of educational failure due to adverse socio-economic circumstances, achieve educational success.

Resilience in one area of endeavour does not imply resilience in other areas. Thus, any definition of resilience is rooted to specific constructs of vulnerability and competence, thereby making it very difficult to replicate research in this field. The present study is tied to the particular risk factors of adverse socio-economic circumstances and its defined outcome of educational success; namely: passing the CEE and CXC assessments in St. Lucia. It refers to individuals who successfully negotiated the challenges imposed by the given risk factors in a specific St. Lucian social context. Consequently, the findings of this study of educationally resilient children may not have implications for other studies of resilient children where vulnerability and competence are defined differently.

The model of resilience for this study is briefly described below:

- High-risk children with resource or protective factors present to modulate the impact of stress factors, will experience a lower level of stress than high-risk children with fewer or none of these factors. As a consequence, they will subsequently achieve a higher level of competence.

- High-risk children with no resource or protective factors to ameliorate the negative effects of the risk factors, will experience a higher level of stress than those with these factors present in their lives. Consequently, they will achieve a lower level of competence.

It was argued in Chapter IV, that resource factors contribute to good outcomes for an individual irrespective of risk status, and does not necessarily have to interact with risk level or stress to produce any beneficial results (Conrad & Hammen, 1993). Rather, they (resource factors) can be combined additively to predict good adaptation (Garmezy et al., 1984). In contrast to resource factors, a protective factor can only have its effect in combination with a risk factor (Rutter, 1990) thereby moderating against the negative effects of a stressful or risk situation, so that the individual is better able to function and adapt more successfully than they would have, had the protective factor not been present (Masten et al., 1990).

The main hypotheses with this model of resilience are that educationally resilient children have formed a secure early attachment with the primary caregiver or significant other, who later exerted a strong positive influence on them particularly with respect to the value of acquiring knowledge for its own sake. This influential person could be a parent or someone who acted as a "mentor" (e.g. teacher, minister of the church, neighbour, peer). Principally, the emphasis is on the child being internally oriented and self motivated, and has a keen interest in learning and achieving educational success without external pressure. Also taken into consideration are the child's level of intellectual ability, home and family environment, parental interest in education, and the effectiveness of the teacher in creating a classroom environment conducive for learning. These concepts which are investigated in this study are now discussed.

Conceptual Framework

The conceptual framework for educationally resilient children developed from the theoretical model of resilience adopted in this study. It consists of factors that are likely to promote children's chances of educational success, and are essential especially for high-risk children. If missing, these factors constitute risk factors which increase children's vulnerability to educational failure. However, because these concepts effectively function only in the presence of risk factors thereby moderating the debilitating effects of stress among high-risk children and assisting

them in attaining educational success, they are considered as protective factors. Thus, as hypothesised in this study's model of resilience, high-risk children need to have all or most of these protective factors operating in their lives in order to achieve a high level of educational competence. Whereas high-risk children with fewer or none of these protective factors present in their lives are less competent.

As discussed in Chapter IV, Garmezy (1985) stated three main types of factor that are protective against risk. The following variables within the conceptual framework and which are also operational in the model of resilience, are included in these three categories. They are: (a) the personal attributes of the child (internal locus of control; intelligence); (b) family factors (parental interest in the child's education; home and family environment; attachment); and (c) external social support (teacher effectiveness; mentor). The conceptual framework is described, giving an explanation of the hypothesised causal relationships between the protective factors and educational success.

Early Attachment

Cicchetti (1990) noted that early attachment is an important element in the "psychological equipment" of individuals in their endeavour to cope with adverse situations which confront them. But Sroufe and Waters (1977) see attachment not as a personality trait, but as a concept that implies selective bonding which should persist over time even in the absence of the person attached to. Rutter (1978a) also sees attachment as establishing early selective bonds which are fundamental for later social development. The evidence of research has noted the critical nature of the first few years of life by tracing the roots of maladaptive behaviour in middle childhood and early adolescence to insecure attachment and bad experiences in the early years of life.

Bowlby's (1969, 1973) theory of attachment stipulates that early attachment to the mother is an essential prerequisite of future social relationships. The theory proposed that all infants however treated, become attached to persons who care for them

(Bowlby, 1982). However, Sroufe (1988) is of the view that the quality of such attachment relationship will vary depending on the quality of care the infant experiences. Sroufe further states that

> *the quality of this early experience, and the relationship to which it leads, exercises an important influence on later develpoment (1988: 18)*

Bowlby (1969) also claimed that early bad experiences may have serious and lasting effects on development, a view which receives support from other research (Rutter, 1972). In contrast, insecure attachment of the child to his/her parents has been identified by Edgeland and Sroufe (1981) as an important cause of psychosocial deprivation particularly of neglect and maltreatment. As noted by Matas et al (1978) the quality of attachment in infancy can predict the quality of maternal support which the child receives.

Attachment is most likely to develop with the person who has the ability to envisage the infant as a human being with feelings and desires and therefore reacts to his/her needs by demonstrating affection and concern, and by bringing comfort through physical care. This demonstration of love and affection psychologists recognise as being essential to the development of the child. Ainsworth (1973) suggests that being sensitively responsive appears to be the only quality in any relationship likely to foster secure attachment or personal bonding.

There is evidence that children who formed early attachment with their mother or primary caregiver, were later able to find pleasure in mastering difficult and challenging tasks, faced problems confidently and enthusiastically, were organised and flexible when confronted with stressful situations, and demonstrated a great degree of autonomy (Sameroff et al, 1982; Sroufe, 1988). This positive continuity in the child's development is evidently a consequence of continuity in emotional and environmental support (Sroufe & Waters, 1977). The implication being that the individual with whom the attachment was formed in infancy, will continue to demonstrate support in the later developmental stages.

Longitudinal studies have been used to examine the sequelae of the quality of early attachment (Fonagy et al, 1994). Their findings showed that early attachment can predict many of the attributes in pre-school and the subsequent developmental stages which risk research has identified as the characteristics of resilient children. These developmental advantages include social functioning and comprehension, and interpersonal awareness (Golberg, 1991; Masten, 1986; Pellegrini, 1985), the ability to deal with challenging situations, and being cognitively resourceful (Masten et al, 1988). These are all personal assets which can be used by children to develop high quality involvement in their classroom environment.

There is also the "prima facie case" as noted by Fonagy et al (1994), that resilient children are securely attached children. Therefore, one can deduce from that statement that early attachment is part of the mediating process where resilience is observed, and educational resilience is no exception. Thus, it is not presumptuous to hypothesise that children who formed early attachment with their mothers who continue to give them emotional support and encourage them in their school work, will achieve educational success.

Mentor

In addition to having a strong attachment with a parent in early childhood, having a "mentor" provides a substantial protective effect which eventually increases the child's chances of educational resilience, because the mentor provides a buffer against the stressful events in the child's life. Besides providing a supportive environment, some parents also act as mentors to their children thereby exerting a great effect on their resilience. This they do in part by influencing their social milieu and support network.

A "mentor" is someone who contributes to the child's adjustment and educational development, and helps to shape the child's social self concept. He/She is exceedingly interested in the child, encourages him/her to place a high value on education, have high aspirations and work hard at his/her school work in an

endeavour to meet these aspirations and to achieve educational success. The mentor is also a motivator and a source of inspiration to the child as well as a role model, and may have an impact on the child's feelings of academic competence and his/her attitude toward school. The "mentor" can be a parent with whom the child establishes a strong and warm relationship, a teacher who is regarded as an important model of identification, or a neighbour or minister of the church from whom he/she finds a great deal of emotional support (Garmezy, 1987; Werner and Smith, 1982). The mentor may be regarded as a substitute for the parent, particularly in situations where the parent does not provide the kind of support which the child needs in order to promote his/her chances of educational success.

The presence of a "mentor" in the life of a child who is vulnerable to educational failure can act as an important protective element to buffer the effects of this adversity. In other words, a "mentor" can enhance educational success in children vulnerable to educational failure. This was clearly seen in the findings of a research study carried out by Clark (1983) which indicated that poor children who were high achievers, had their parents who exercised firm and consistent mentoring. The mentor can also help to enhance self esteem in disadvantaged children during stressful situations, and provides the assistance necessary for success both in and out of school (Clark, 1983).

Locus of Control

In previous research the child's locus of control has been found to be instrumental in the protective processes (e.g. Luthar, 1991; Werner and Smith, 1982). Resilient individuals have demonstrated an internal locus of control by asserting themselves in the classroom. They have also demonstrated a deep faith in their ability to control their environment (this includes their classroom environment), rather than believing that the external environment was determinative (Luthar 1991). Woodard (1992) also associated internal locus of control with urban students who achieved academic success. According to him, they believe they hold their future in their own hands. Kahl; (1985) also believes "*that a person's success is mainly dependent on the energy*

this person is ready to invest" (p.4893). It is the belief that the forces which help to shape the life of an individual are largely within their own control. Internal locus of control also signifies the belief that personal responsibility is accepted for one's learning and performance. It can be argued on the basis of these beliefs that educationally resilient children are internally directed and should demonstrate a great level of functioning with increased levels of stress.

Support for this argument can be seen in the learned helplessness thesis proposed by Seligman (1975). This suggests that individuals who believe that they are incapable of controlling what happens to them, and have little personal control over learning and performance, resign themselves to becoming passive and consequently restrict their coping abilities. In contrast, individuals who firmly believe that life events and outcomes are within their control will avoid learned helplessness, and use their coping skills to overcome aversive situations which are consequences of adverse socio-economic circumstances.

It has been argued (e.g. Luthar, 1991) that internally oriented children who have experienced setbacks have a tendency to display great strength in order to master the threatening stressful situations which they encounter. Lefcourt (1982) observes that the more positive effects of internality influence the personality characteristics of the children and also their social interactions, and can also be located in the area of academic achievement. Lefcourt believes that when variables relevant to academic achievement are being considered, locus of control receives considerable attention, and is regarded as a significant determinant to academic achievement. In addition, internally oriented children have been found to manifest high self esteem (e.g. Werner and Smith, 1982), have exhibited greater self acceptance (e.g. Lefcourt, 1982) and other general indicators of adaptive functioning (e.g. Luthar, 1991). On the other hand, children with high externality have demonstrated behaviour maladaptation, lower academic achievement levels and powerlessness when confronted with stressful situations (e.g. Lefcourt, 1982; Masten et al 1988).

Keeves (1972) named two attributes of educational success indicative of internal locus of control namely ability and effort. He believes that whereas ability is a stable but uncontrollable attribute which typically has no variation from one situation to another, effort, in contrast, is an unstable attribute which the child feels he/she can influence and exercise control over. According to Keeves, the attributes indicative of children who are externally oriented are "task difficulty and luck". Task difficulty he claims can be considered as a stable attribute but luck is unstable. However, both these attributes seem to be outside the personal control of externals. As a consequence, internal locus of control is widely considered as an important factor in resilience. But it is interesting to contemplate on whether internals are able to translate their internality into educational success and how the approach to academic achievement differs between externals and internals.

Intelligence

Intellectual ability is one of the most extensively investigated variables in resilience research. This dispositional attribute of the child may serve protective functions especially in situations of high risk. Research studies (e.g. Rende & Plomin, 1993) have indicated that intellectual ability is partly influenced by genetic factors (See Chapter IV), and therefore has the potential to promote resilience despite the presence of risk factors. Intelligence can be developed and nurtured. Hence, the specific environmental context within which it functions will determine the outcome of this presumed protective factor.

In research carried out with young children and pre-adolescents intellectual ability has been found to be protective against stress in predicting various indices of competence (e.g. Masten et al, 1988). It gives the more intellectually able high-risk children the educational advantage. However, despite extensive research on intelligence, it is still not completely understood how it (intelligence) interacts with stress in predicting adaptation. Some researchers have shown that intellectual ability have protective effects (Garmezy et al, 1984; Masten et al, 1988; Werner & Smith, 1982). Others (e.g. Luthar, 1991) have produced a counterintuitive finding that intelligence can

sometimes function as a vulnerability mechanism in the face of stress. According to her findings, intelligence is positively related to competence for academic achievement at low stress levels. But when stress levels are high, on the other hand, some intelligent children lose their advantage, and demonstrate competence levels which are on par with those of less intelligent children experiencing the same levels of stress. Given the wide variety of differing findings across existing studies, a great deal more research is required to understand the specific context within which intelligence functions as a protective factor. It is hoped that this study will help to determine the effect intelligence has on high-risk children operating as a protective factor.

Parental Interest

Parental interest in their children's education has been known to influence academic achievement (that is, in conjunction with other positive factors).

It is widely thought that parents of working class children do not encourage them with their school work. There is evidence to suggest that this is not necessarily so. In many St Lucia homes in poor neighbourhoods parents can offer very little material and intellectual help to their children. A study conducted by Tabe (1964) culturally deprived children in the Caribbean island of Jamaica, found that many parents from homes with limited educational resources did not understand what was required for children to achieve educational success. As a consequence of this lack of educational background, parents were incapable of giving academic assistance to their children, nor were they able to motivate them to aspire for higher education. However, more recent studies (e.g. Kean, 1974) suggest that working parents in Jamaica are now beginning to have high expectations of their children with respect to their educational achievement. The same is true in the St Lucian situation.

The rate of illiteracy in the general population is very high in St Lucia (about 45%) and there is evidence to suggest that in most working class homes parents can neither read nor write (Ministry of Planning, 1992). (The results of the 1991 Adult Literacy

Survey is produced as Appendix 1.2). In addition, many of them are fluent in "Patois"' the French Creole which is the second official language, and are therefore unable to discuss matters with their children in English, the language used in school. But in spite of these difficulties, some parents encourage their children by wishing them well, by having high expectations of them, and by making sacrifices to provide the necessary materials for academic work. They try to kindle a certain level of aspiration in their children by encouraging them to work hard at their studies in order to secure a good job upon graduation.

Ragbir (1975) measured parental interest in Jamaica on the basis of comments by the class teacher and by the record of the frequency of parents' visits to schools to discuss their children's progress. He matched the findings with students tests results and found that the children whose parents were most interested in their education produced the highest average test score.

The assumption is, the more knowledgeable parents are about their children's school (especially at primary level) and the education process there, the more beneficial it will be for their children. It can be argued however, that this assumption supports the notion that knowledge of school and how it works will in itself generate spin-offs for the children to somehow perform better in certain aspects of social and academic achievement (Howe, 1990). But Bailey (1980) further argues that the pupils' enhancement is not usually achieved in such a simplistic manner. And not surprisingly so, assures Howe (1990) "*since parents themselves tend to find their own level with respect to understanding the processes and mechanisms of schooling*" (p. 35).

Woodard is of the view that academic excellence reflects the culture of success which is "... *created within a stable, supportive family that places the highest value on love and education*" (1992: 58). According to him within such environmental culture of success with families of high academic achievers certain characteristics were prevalent. He found that mothers were tough; they accepted no nonsense. They established clear rules and norms for achievement. Regular study hours were

maintained (Woodard, 1992). This research was conducted with youths attempting to overcome the odds in urban environments.

Kahl, (1985) also indicated that the level of parents' education and their access to relevant educational information place limitations on their ability to support their children's education. According to him such limitations reduce parents' "ability" to function as models of "desirable behaviour" (p. 4892). Kahl is also of the view that *"parents' attitudes towards school, interest in their child's school experiences, contact with school or teachers, parents' aspirations for their children"* (p. 4892) are indicators which can predict the disposition of the child to succeed in schools.

Teacher Effectiveness

Teachers too play a major role in whether or not children achieve educational success. It can be argued that they also have an influence on children's development. In sociology and social psychology the classroom is often regarded as a social system with both an informal and formal structure. Whereas the informal system in the classroom can be defined by the personal relationships within the context of social interactions, the student's role as a learner is defined within the formal structure. This role is strongly dependent on the educational philosophy of the school and the way in which it is conveyed to the students by the expectations and behaviours demonstrated by teachers as they teach (Kahl, 1985). Kahl is also of the view that the extent to which the characteristics and behaviours of students fit this philosophy will determine the extent to which the teacher awards formal gratification to them especially in the form of school grades. It can be argued however, that these elements are what constitute the main basis of educational success.

It can be assumed then, that the effective teacher will ensure that his/her classroom is well managed and produces a predictable environment in which students know what the teacher's expectations are and what is required if they are to succeed. Such predictability will occur because of the consequences of following class rules and procedures, and engaging in educational activities which should be challenging and

rewarding to children (Emmer, 1985). However, Brophy and Good (1974) are of the view that the effects of teacher's expectations with regards to their students' levels of achievement may be in part due to their influence on the expectancy level of their students. It has been argued that the teachers praise less and criticize more those students whom they expect to be low achievers more frequently than those expected to be high achievers. But what is significant is that the children who are more involved and highly motivated in school learning, and have effective teachers who are warm and supportive tend to do better in school (Eccles, 1983). These highly motivated children also want "*increased cognitive stimulation*", which Freeman (1990: 107) believes

> *is somewhat dependent on teachers' task-setting abilities, including a problem-posing as well as a problem-solving approach to thinking.*

Thus, according to Freeman,

> *The most effective teaching, at all levels, constantly seeks to develop insights, because it is the basis to the learning process, and is part of it at all levels of learning and teaching. (1990: 107)*

Maslow (1970) identified the need to be accepted and to belong as basic human needs. In the classroom these needs become expressed as children seek out praise, warmth, nurturance and attention from the teacher and also peers. These needs are important incentives for effective classroom learning and academic performance. The effective teacher can enhance educational success by ensuring that these needs are met.

Home and Family Environment

The quality of the home and family environment can have a great impact on the quality of life of the high-risk child. A poor home environment can place a child at high risk for educational failure. It can be argued that children who come from homes marked by family discord and conflict are ego-brittle, and are more likely to have difficulties coping with the adverse stressful circumstances which they face. In contrast, high-risk children from poor homes who live with parents who are

continuing their parenting effectiveness, monitoring their behaviour, are loving, patient and attentive, and where family cohesiveness exists, will find some protection against the risks associated with their low socio-economic status. These children are able to find within the home environment love, attention and a sense of security; processes which help to increase their capacity for coping with stressful circumstances.

A good home environment has often been correlated with resilience (Garmezy, 1985; Luthar & Zigler, 1991; Werner & Smith, 1982), and academic achievement (Fuligni, 1994). However, Fuligni is of the view that the major concern should not be with the correlates of school learning but *"the analysis of the processes whereby demographic and other variables exert their effects"* (1994: 2624); a view which has captured the attention of developmental psychologists. The longitudinal study by Werner and Smith (1982) indicated various protective effects of family functioning that were significant predictors of resilience; for example alternative caregivers in the home, presence of father, mother's long term employment and the quality of relationship with the family. Rutter (1979) stated that a good relationship with at least one parent can protect the child against risks associated with family discord. Woodard too noted the importance of strong traditional values such as "*good work habits, high morals and ethical standards, an expectation of excellence in school.*" (1992: 59). However, what high-risk children need to promote their chances of educational resilience is a stable and supportive family *"that places the highest value on love and education"* (Woodard, 1992: 59), and parents with beliefs in opportunities through education.

In sum, "*the influence of the home environment"* says Fuligni, "*is tramsmitted to children in many different ways*". These may range from "*the effects of the objective, physical environment in which the child lives to the subjective, psychological environment created by parents through child-rearing practices*" (Fuligni, 1994: 2625).

Summary

This chapter described the model of resilience adopted in this study. It related to the hypothesised causal relationships between high risk factors and stress, and the effects of protective factors in raising or lowering potential levels of educational competence. The conceptual framework underlying the model was described in terms of key variables hypothesised as primary contributors to educational success. The implications being that each of the concepts described reduced the level of stress in high-risk children thereby increasing their level of educational competence. Because these concepts produce such positive outcomes in high-risk children they were considered as protective factors. Hence, risk factors operating without the positive effects of protective factors will produce a low level of educational competence in high-risk children.

CHAPTER VI

RESEARCH METHODS

"Enter into the world. Observe and wonder. Experience and reflect. To understand a world you must become part of that world while at the same time remaining separate, a part of and apart from". Halcolm's Methodological Chronicle (cited in Patton, 1990)

Introduction

This chapter defines the boundaries within which the study is conducted and explains how educational resilience is investigated, and why particular techniques, methods and procedures were employed in the preparation and data collection exercise. It begins by describing the aims of the methods in terms of the model and hypotheses developed in previous chapters, then describes the methods designed to achieve these aims.

The fieldwork was conducted over a period of four months, June to September 1994. It was divided into three sessions, with brief intervals in between. The search for information from documents was conducted in the first session. Afterwards, there was a short period off the field during which time the personal details obtained from documents were organised to select the sample, and to design the questionnaire. The second session included piloting and distribution/administration of questionnaires, Nowicki-Strickland Locus of Control Scale and the Raven's Standard Progressive Matrices for completion by the participants. In the interim, data received from questionnaires were used to select the final four sub-samples. During the third and final session in the field, the two interview schedules were piloted and the in-depth interviews were conducted with forty of 126 participants.

While in the field, the magnitude of what had to be done was realised by the researcher. It was no easy task for a single researcher to travel the length and breadth of St. Lucia to follow up on correspondence not returned, and to facilitate and work with respondents. Thus, the researcher prepared an "in the field" work schedule in which at least one day was allocated for each respondent.

Aims

1 To identify educationally high risk groups representing resilient and non-resilient population.

2 To obtain information on protective/resource factors
(a) in home setting (b) in school setting

3 To obtain measures of personal characteristics having implications for resilience.

4 In recognition of the many varied ways resilience may be achieved, extended interviews are preferred to structured questions to obtain the richness and variety of experience likely to have occurred.

Research Design

A longitudinal design in which a cohort of high risk students are followed through their school career would have been preferred, but time constraints of the study resulted in a cross-sectional design involving two age cohorts at different stages of the educational system namely: at the primary education level, having completed the Standard 4 syllabus and taken the CEE, and at completion of secondary education having taken the external CXC examinations. Passing the CEE and proceeding to secondary education and passing the CXC examinations and gaining access to St. Lucia's only post-secondary institution are used as indicators of educational success or competence.

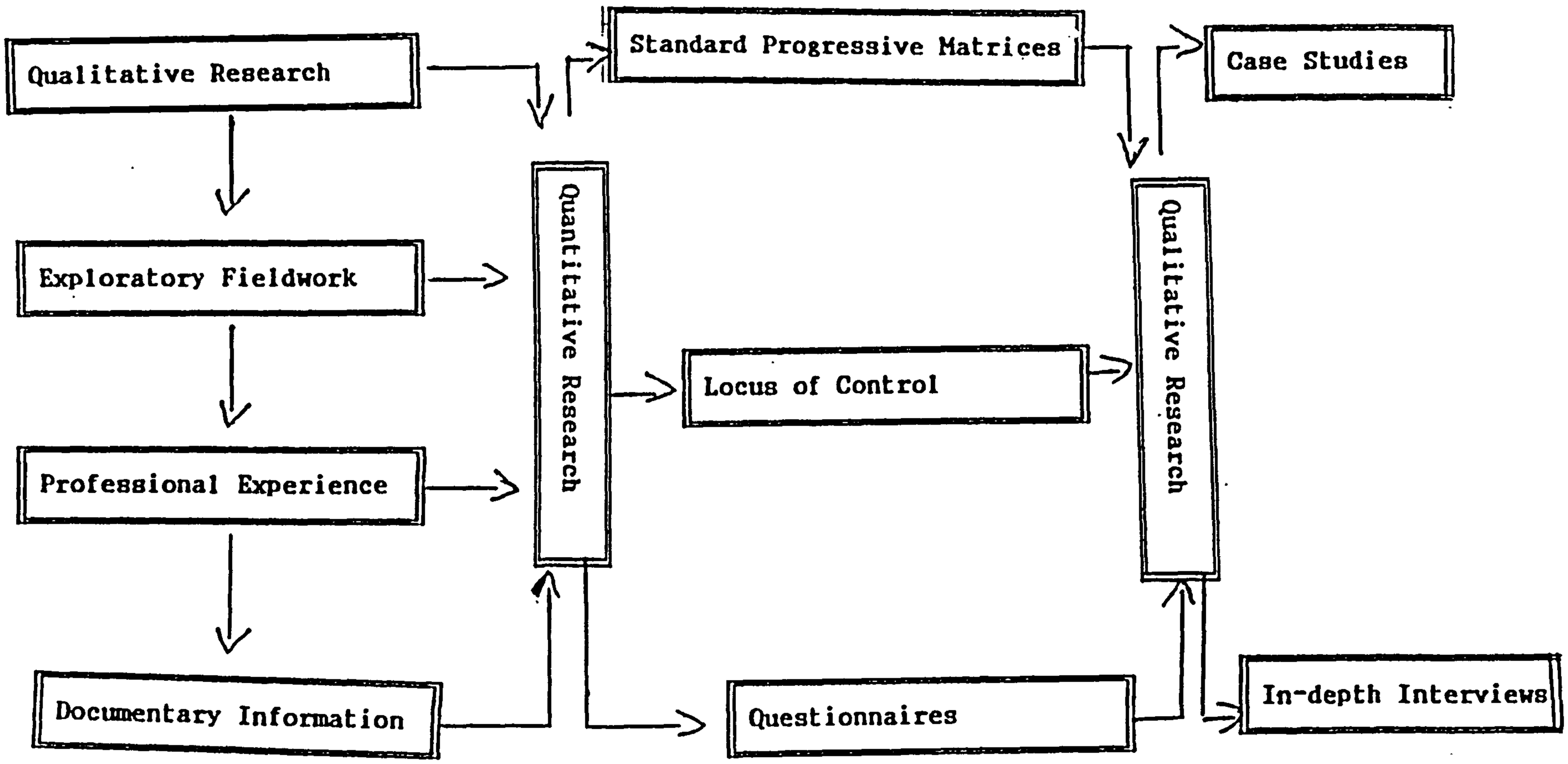
As stated in Chapter V, vulnerability to educational failure was defined in terms of the adverse socio-economic circumstances of family living conditions in poor neighbourhoods. Certain communities in St. Lucia have high proportions of severely deprived residents in terms of poor housing, over-crowded conditions, unemployment or under-employment in menial occupations, family violence and illiteracy.

In this study the research design is represented graphically in Figure 1. It was adapted from Miles & Huberman (1994), and illustrates the qualitative and quantitative lines of enquiry adopted for this study for data collection and analysis. It outlines the operational procedures used to collect the data beginning with the qualitative method of exploratory fieldwork where personal information was collected from documents along with some degree of unstructured participant observation. This led to the development of questionnaires and acquisition of other quantitative instrumentation, namely Raven's Standard Progressive Matrices (SPM) and Nowicki-Strickland Locus of control (LOC) Scale. The findings from the quantitative data were further "deepened" through in-depth interviews in the next round of qualitative work, and the construction of four case studies which represent each of the four sub-samples. Data collected from both research types can be

> *productive for descriptive, reconnoitring, exploratory, inductive, opening-up purposes. And both can be productive for explanatory confirmatory hypothesis-testings purposes (Miles and Huberman, 1994; p. 42).*

All 126 children from the two cohorts described completed questionnaires which provided preliminary socio-demographic information about them. They also completed the Nowicki-Strickland LOC Scale (Norwicki and Strickland, 1973), and Raven's SPM as a measure of mental ability. The research design adopted in this study used both the qualitative and quantitative methods.

FIGURE 1: RESEARCH DESIGN: LINKING QUANTITATIVE AND QUALITATIVE RESEARCH METHODS



Adapted from Miles & Huberman (1994). **Qualitative Data Analysis: A Sourcebook of New Methods** (2nd ed.) CA: Sage Publications

Methodological Issues: Rationale for Using Qualitative and Quantitative Methods

Both numbers and words, theory testing (of quantitative research) and the groundedness of qualitative research, are needed to understand the reality of our immediate environment and the world. In their persuasive argument in support of quantification Weinstein and Tumur (1978) see it as

> *a means of making available techniques which add power and sensitivity to individual judgement when one attempts to detect and describe patterning in a set of observations ... why throw away anything helpful? (p. 140).*

There is also evidence to suggest that quantitative and qualitative methods are inextricably intertwined at the levels of specific sets of data and research design and analysis (Howe, 1988). Contributing to the argument, Blease and Bryman (1986) believe that a good case can be made for the integration of the two research techniques.

In this study the two research methods have different objectives. However, although they are often considered as competing paradigms, the assumption should not be made that they are opposing. As noted by Blease and Bryman:

> *Not only may the two be mutually enhancing, but a sensitive merger may provide a more complete picture, which might be more satisfying and attractive to academics and policy makers alike. (1986: 167)*

The main reasons for using them in this study are as follows:

- to broaden the scope of the study and to strengthen the research by utilising various methods such as questionnaires, in-depth interviews, documentary information, locus of control scale and Standard Progressive Matrices.

- the questionnaires provided basic information on a larger sample than it was possible to obtain from interviews with the limited resources available to the researcher;

- background information was easily obtained from subjects so as to allow more time in interviews for more detailed complex issues;

- qualitative interviews explored the processes impinging on each individual, their experiences at home and at school;

- in the analysis stage qualitative data helped to facilitate, clarify, and interpret the findings of the quantitative data;

The phenomenon being studied would suggest that an appropriate research design be implemented, one which will be beneficial and create in-roads into understanding educational resilience. This design is therefore imperative.

The Research Process

Sampling Procedures

Sampling was crucial for later analysis in the study and it involved not only the two cohorts observed, questioned and interviewed but also their social context. Therefore, choices were made about using the cross-sectional design and who formed part of the samples.

Quantitative researchers usually seek statistical significance by aiming to work with large numbers. In contrast, qualitative research usually work with small purposive samples of subjects whom they study in-depth within a specific social context. Because this study was multi-method in orientation, this researcher decided on a sampling method which identified purposefully four groups of ten from severely disadvantaged home backgrounds. The principal aim was for these four groups to be homogeneous in terms of their socio-economic and family circumstances. It was of extreme importance that the groups met this criterion in order that explanations for differences between the educationally resilient and non-resilient groups should not merely be due to the former being more advantaged than the latter. The sampling

procedures now discussed will define the cases being investigated in this study.

The types of sampling used were adapted from the typology of sampling strategies of Kuzel (1992). They were stratified purposeful type of sampling with the purpose of illustrating sub-groups. This also facilitates comparisons between the sub-groups. The other type of sampling adapted was the "criterion" in which all the "cases" being investigated in the study had to meet the criterion of being at risk of educational failure due to their adverse socio-economic circumstances.

What follows is a discussion of the stages used in selecting the sample:

Stage 1 Ministry of Education records 1992/93 and school records were used to randomly select children from known poor communities and of low socio-economic status who:

a) failed the CEE in 1993 and remained at their primary school; these were labelled the "primary non-resilient" (PNR); (N=33)

b) succeeded the CEE in 1993 and proceeded to Form One at the secondary school; these were defined as the "primary resilient" (PR); (N=43)

c) failed the external CXC examinations in 1993 and were unable to secure a place at the Community College; these were the "PR but secondary non-resilient" (SNR); (N=21); and those who

d) did exceptionally well at the CXC examinations in 1993 to gain admission at the 'A' level/Division of Arts and General Studies at the Sir Arthur Lewis Community College. These were the "Secondary Resilient" (SR) (N=29).

Stage 2 97 disadvantaged children from the primary and secondary schools were randomly selected, but at the Division of Arts and General Studies 'A'level College all the children (twenty-nine) from poor communities and low socio-economic status were selected. All 126 children selected were given questionnaires to complete.

Stage 3 From the random samples and from the 'A'level, children were stratified and purposefully selected on the basis of questionnaire responses which provided further socio-demographic information on them and their family circumstances. Forty of the most disadvantaged children, ten from each group, were selected to form the four sub-samples

These four sub-samples formed the core of the investigation and participated in in-depth interviews aimed at seeking information on the protective factors namely early attachment, parental encouragement in education, teacher effectiveness, mentor and locus of control. These factors were examined to determine the extent to which they increase educational resilience. The results of the Nowicki and Strickland Locus of Control Scale and the Raven's Standard Progressive Matrices completed by the children were also used for that purpose.

Gaining access

The researcher's lengthy involvement in education and personal knowledge of Ministry of Education officials, Principals of Primary and Secondary schools, and Vice Principal of the Community College facilitated entry into the field. Nevertheless, a letter indicating the scope of the research and its implications for the development of education in St. Lucia was prepared and dispatched to them six weeks before entry into the field (See Appendices 2 & 3). On this letter also, permission to gain access to schools was requested.

A similar but simply worded letter was sent to each parent of the children in the four sub-samples seeking their permission to interview their child as part of the research project (Appendix 4). The letter also indicated a tentative date and venue for conducting the interviews. These letters were dispatched by post or hand delivered after the personal details were obtained from schools and the statistical department of the Ministry of Education to select the samples.

Whereas the subjects from Samples 1, 2 and 4 were accessible in schools, it was very difficult to establish contact with the subjects from Sample 3 who had left school and entered the job market. Thus, a separate letter was sent to them by post or delivered by colleagues using their last contact address at the school last attended (Appendix 5). In addition, the researcher also enquired of their whereabouts from students and teachers before dispatching the letters. The letter briefly stated the purpose of the research and requested their co-operation through participation, and by completing the questionnaire enclosed. There was a detachable section at the bottom of the letter with the date and place of the interview. Subjects were invited to accept or change the date to one more acceptable to them and return it in the self addressed and stamped envelope.

Out of a total of thirty letters and questionnaires dispatched to Sample 3, twenty-one were returned. Of the missing nine children, three moved away from their last address and could not be contacted; one girl was pregnant (close to delivery) and did not want to participate; two enrolled in private schools and had to be eliminated; the parents of two (girls) did not know of their whereabouts; and several attempts to contact the last boy proved futile. The venues for the interviews had to be conducive for that purpose. Thus, three such venues were identified. One was used for those children who lived in the north-eastern and north-western parts of the island, and the other two for those who lived in the south, south-eastern and south-western parts. The researcher reimbursed the cost of travelling to children.

Upon gaining access, permission to consult certain relevant documents had to be requested. Some documents, particularly at the secondary schools were regarded too

confidential to be released, but access and availability to them were made possible by the Education Officer of Secondary Schools. Besides, most of the documents from the secondary schools were studied at the Ministry of Education.

There were no problems encountered at the 10 selected primary schools, the Community College and the statistical department at the Ministry of Education, but again the documents were all considered confidential and therefore had to studied on site. However, at the Ministry of Education prior clearance had to be sought from the head of the statistical department before the documents could be retrieved and released.

Instrumentation

Instrumentation consists of specific methods for collecting data. Two of the instruments (Nowicki-Strickland Locus of Control Scale and Raven's Standard Progressive Matrices) used by the researcher are validated and widely used in prior studies. The importance of using validated instruments is emphasised by Miles and Huberman who stated that

> *We need common instruments to build theory, to improve explanations or predications and to make recommendations about practice. ... Using validated instruments well is the best guarantee of dependable and meaningful findings (1994: 35).*

Like the conceptual framework and sampling prior instrumentation was also driven by theory, and was extremely important in terms of internal validity. It gave the researcher time to define and clarify important concepts and set priorities. This facilitated the ease with which data collection became manageable.

Documentary Information

In this research project the documents used were students' record cards, admission registers and registration cards, National CEE and CXC examinations files, and Ministry of Education Annual Statistics 1992/93. These educational documents

contained information which served as preliminary indicators of children's socio-economic status and their level of academic achievement.

The information sought was fairly straightforward and therefore reduced the danger that bias may result. It was used to identify the population from which the samples were selected. The knowledge obtained from the documents assisted in the construction of the questionnaire, and was also used to augment much of the qualitative information obtained from the interviews. It also provided some valuable insights into how to perceive the samples. The information required included (child's) age, place of residence, home address, previous place of residence, parents occupation, record of achievement, personality profile, nationality, and CEE and CXC examination results for 1993.

The research design allowed for the information from the various educational documents to be organised and segmented in the *"exploratory fieldwork"* stage, that is, before the main data collection exercise was conducted. This was done in accordance with children's level of educational achievement vis-a vis demographic information about them. A sample of "work sheet" can be viewed in the Appendix.

Questionnaires

Oppenheim (1992: vii) wrote that

> *the world is full of well meaning people who believe that anyone who can write plain English and has a modicum of common sense can produce a good questionnaire.*

But he further demonstrated that although common sense and the ability to write plain English are pre-requisite for designing good questionnaires they are not sufficient. The questionnaire design for this study followed the process of information gathering from educational documents. It is reproduced as Appendix 13.

Composition of the Questionnaire

This data-gathering instrument was designed for all 126 children in the main sample. The questionnaire method was specifically selected because it was very practicable with respect to the collection of data required for the selection of the four sub-samples. Besides, the researcher had limited time at her disposal; and the questionnaire was ideally practicable in this circumstance. It was designed to include items which would produce information on the following variables: Home and social environment, composition of family, parental occupation and education.

(a) Home and social environment (Questions A1 - A9)

Questions from this section generated information on the type of house children live in, the tenure, and the amenities and domestic appliances they have in the home. These items were used as social indicators to measure children's socio-economic conditions. (See Appendix 13). Questions A4 and A5 were included to draw information which helped determined the extent to which children live in overcrowded conditions. Question A7 was used to identify the language most frequently spoken in the home: English or Patois?

In order to have some indication as to the type of learning environment created in the home, It was important to know whether children had educational materials at home (excluding school textbooks); hence the inclusion of question A8. Question A9 was used to determine the ethnic composition of the sample.

(b) Family composition (Questions B1 - B3)

The questions included in this section sought to determine the number of adults and children living in the home, the age position of the child, and the persons who acted as the mother figure and the father figure.

The researcher was able to use that data to identify single parent families, and in combination with questions A4 and A5, also determine the extent of overcrowding conditions in the home.

(c) **Education of parents (Questions C1 - C2)**

Questions were asked to find out the highest level of schooling parents had attended and the qualifications they obtained. This information was necessary in determining the extent to which parents were able to assist their children with school assignments.

(d) **Parental occupation (questions C3 - C7)**

Questions under this variable produced information on parental employment status, their hours of work, that is, whether they were in full or part-time employment, and the position they occupied at work. Question C6 helped to identify the actual job or occupation of the parents of children. These occupations were classified under five occupational status categories namely: not employed, unskilled manual, semi-skilled manual, skilled manual and clerical. No parent was employed in a managerial or professional capacity. These categories were combined with questions A1, A3, and A6 to form a *"Social Index"* which was used as a measure of socio-economic conditions. The rationale for such an index is given in Osborn (1987).

Piloting the Questionnaire

The questionnaire was piloted to determine how long it would take subjects to complete it, and to ensure that the questions and instructions were well understood, and to delete or modify any question which did not produce valid and reliable data.

The researcher was able to obtain permission from two friends in South East London to give the instrument a trial run with their three children ages twelve, fourteen and seventeen years. They were all St. Lucians, and their socio-economic status was fairly similar to those who formed the main sample of this study. The children completed questionnaires at their homes but in the presence of the researcher. They were questioned after completing the questionnaire, and their responses were used along with the completed questionnaires to modify the instrument.

A more systematic pilot study would have been desirable, but headteachers approached in England with the request to carry out a pilot study in their schools refused permission on the grounds that they thought the questions were "too personal".

Administration of Questionnaires

Structured and closed questions were used on the questionnaires to obtain straightforward information which facilitated analysis.

The modified questionnaires were administered personally to the subjects in samples 1, 2 and 4 in June 1994, and they were completed on the spot under the direct supervision of the researcher. A briefing session which explained instructions and possible problems students might have encountered whilst filling in the questionnaires, was held prior to the commencement of the questionnaire completing exercise. There the researcher had an opportunity to explain the purpose of the study to the participants, and solicit their co-operation in their further involvement in the research. Participants at the primary and secondary schools were seen in small groups at their respective schools during normal school hours, whereas those from the Community College were taken together as a large group. Each student was allowed sufficient time to complete the questionnaire, and hardly any experienced difficulty in doing so. The researcher ensured that students responded to all questions appropriately.

However, as mentioned earlier, with regard to group 3 (SNR), thirty questionnaires were mailed or hand delivered to them by colleagues and the researcher, but only twenty-one completed questionnaires were returned. Each of the twenty-one subjects from SNR perused the completed questionnaire with the researcher to ensure that all questions were appropriately responded to.

These questionnaire data were used to identify the children in the main sample who were most disadvantaged, and to select from among them the four sub-samples used in the qualitative part of the research. Like the information obtained from educational documents, the quantitative data from the questionnaires were used to augment much of the qualitative information obtained from the interviews.

In-depth Interviews

According to Moser and Kalton (1971) the attainment of a successful interview is more involved and complex than it would seem when the aim is simply to obtain information from an informant. Brenner et al (1985) defined the interview as developing a view of something between separate people, but Wiseman and Aron (1972, cited in Bell, 1987: 92) used the analogy of a fishing expedition to define interviewing. Cohen (1976: 82, cited in Bell, 1987: 92) pursued this analogy by adding that

> *like fishing, interviewing is an activity requiring careful preparation, much patience, and considerable practice if the eventual reward is to be a worthwhile catch.*

This was the way to proceed in this study as twenty of the respondents were school children below the age of fourteen years. However, it was imperative to gain the confidence of all respondents at the initial stage.

Although Burgess (1984) defines the interview as conversation, and qualitative researchers argue for an unstructured approach, the researcher had to focus on how best to obtain from the respondents information on the factors which increase or

decrease their chances of educational success or failure. And so consideration was given to Bell's (1987) argument that

> *Conversations about a topic may be interesting and may produce useful insights into a problem, but it has to be remembered that an interview is more than just an interesting conversation. You need certain information and methods have to be devised to obtain that information if at all possible (p. 94).*

With this view in perspective, a practical approach had to be adopted for use in this study. The semi-structured approach was used based on categories of issues generated from the hypotheses and research question. This approach provided an opportunity for a focused interview with an established framework or structure, that provided specific information and ensured the detailed coverage of all issues which were considered crucial to this study.

The preparation for interviews followed very much the same procedures as the questionnaires. Simple problems were encountered in designing the interview schedules as with the questionnaires. Thus, care had to be taken in selecting the topics, devising questions and prompts, chronologically structuring of questions, considering methods of analysis, and piloting the schedules.

Piloting the Interview Schedules

Like the questionnaires, it was not possible to pilot the interview schedules in British schools because they were considered *"too personal and sensitive"*. However, with the kind co-operation of two colleagues (research students) the researcher was able to pilot both interview schedules. Ideally, piloting the schedules should have been done with persons of similar characteristics to those who form the sample of this study, but that was not possible. Hence, the two volunteers, each of whom was given a brief description of one of the two cohorts, were requested to impersonate or imagine themselves as members of the two cohorts in order to respond appropriately. At the end of the interviews, the researcher elicited responses and suggestions from the volunteers which greatly assisted in modifying the interview schedules.

Due to the age difference of respondents, two different interview schedules were prepared, one for each cohort. The schedule for the 13 to 14 year-old age cohort consisted of thirty-five items, whereas the schedule for the older cohort comprised forty-four items. The schedules were divided into the following main categories namely: Attachment, Family, Self, Mentor, Schools/Effective Teaching. Both interview schedules are produced as Appendices 11 and 12 respectively.

Interviewing: Data Collection

It was essential initially to build some degree of trust in respondents in order to get responses to questions some of which were quite sensitive. This was possible because the researcher had previously established personal contact with the respondents when the questionnaires, Locus of Control Scale and the Standard Progressive Matrices were completed.

Each interview began by taking the interviewee back to the first few years of his/her life and chronologically progressing to the present. It began with the question *"Tell me as much as you can about the first years of your life"*. This first question under attachment was followed by subsequent questions which yielded information on the child's early experiences, the primary caregiver, and the nature of the relationship which existed between the child and mother or other caregiver.

The questions on attachment were followed by this question on the home and family environment: *"I am interested in what went on, and still goes on in your home and with your family. How would you describe your home and family?"* This was followed by questions which generated useful information on the child's relationship with parents in childhood and at present, the level of support and encouragement received from parents and how they demonstrated their interest in their educational progress. Also, responses reflected the nature of parental relationship with other family members and with each other, the degree of family cohesiveness, and the general organisation of the family. Data from this section helped to assess the nature of the child's home and family environment, the extent to which the child found support

within it, and how conducive it was for learning.

To substantiate the data collected from the Nowicki-Strickland Locus of Control Scale, children were asked eleven lead questions about themselves beginning with *"Now let us talk a little about yourself. How would you describe yourself?"* The children were questioned about their experiences (both good and bad), their strong and weak points, their goals and life's ambitions, how they try to develop themselves and the activities in their lives which are important to them. They also responded to the question: *"What are the most important experiences and influences that have helped make you the kind of person that you are?"* They also described the community where they lived and indicated whether they liked it or not, giving reasons for their option. The main purpose for asking these questions in this section was to elicit information from them to determine the extent to which children are internally or externally oriented.

Having someone to turn to when security and support are not readily available in the family can be a very important protective factor in helping children cope with or survive adversity. Children need an adult to whom they can turn or who will come to their rescue; someone who will help to motivate and inspire them to learn. Under the main category of "Mentor", children were questioned to determine whether such an individual was present in their lives. They were asked indirectly about the people they spent most of their time with, the people they admired and wished to emulate, those they trusted and confided in, those whose ideas and opinions meant the most to them, and anyone in particular who had confidence in their ability to do well and whether this person urged them on. Responses were also obtained on any close relationship(s) formed since childhood.

The last section took children on *"an educational tour"* from pre-school to school now enrolled in; and in the case of Sample 3, school last attended. This lead question set the pace for the questions which followed: *"Now let us concentrate on your school years. What can you remember about the first time that you went to school?"* The questions asked yielded information on the children's school

experiences, the teachers whom they encountered and how effective they were in doing their work, their relationship with their teachers and their classmates, systems of awards and punishment. They also commented on how they prepared for their CEE and CXC examinations and to what they attributed their success or failure. This section was designed to produce information on teacher effectiveness, which helped determine the extent to which it increased children's chances of educational resilience.

Although an attempt was made to address all the questions in similar ways, that was not always possible. There was need sometimes to vary the sequence and wording of the questions on the basis of the responses given by the respondents.

All the interviews were tape-recorded with the permission of the respondents. On average, interviews with the children from the PNR and PR groups were of ninety minutes duration, with three lasting over ninety minutes. More interview time was required for the children of the SNR and SR groups because their interview schedule was longer, and their discussions on certain issues were more comprehensive. Thus, their interview sessions were of two -hour duration with three lasting approximately 2 1/2 hours. These interviews were scheduled at times most convenient to the respondents, and in places which produced the desired atmosphere conducive for the purpose of in-depth interviewing.

Constraints in Interviewing

Using interviews as a qualitative method of data collection can be a highly subjective technique, therefore the danger of bias creeping in was always in the forefront of the researcher's mind. Besides, the writer's familiarity with the phenomenon being studied through personal experience and conceptual interests, and prior knowledge of who was educationally resilient and who was not, also increased the possibility of bias. In addition, there was the likelihood that the interviewer would inadvertently lead the interviewees in the direction which will obviously produce results consistent with the hypotheses under investigation. The danger of bias was observed by Gavron (1966, cited in Bell, 1987: 95) as one which is very difficult to avoid completely.

Similarly, Borg also noted the danger in his observation that

> *... the tendency for the interviewer to seek out the answers that support his preconceived notions... contribute to biasing of data obtained from the interview (1981: 87).*

There was also concern with the possible dangers inherent in research conducted by a single interviewer. Conversely, research employing several interviewers faces the problem of inter-interviewer reliability whereas this is not a problem with only one interviewer. Selltiz et al (1962, cited in Bell, 1987: 95) observed that interviewers were not machines but human beings, and the manner in which they conduct themselves may have an effect on the interviewees.

However, with an awareness of these dangers, great care was taken to maintain an open mind and objectivity, and to remain detached even when interviews became very emotional as they sometimes did when respondents were reliving their childhood experiences. The interviews yielded very rich data and interesting insights into the lives of respondents at the various developmental stages, and the kinds of factor that are likely to enhance the chances of educational resilience in the St. Lucian /Caribbean context.

Locus of Control Scale

The Nowicki strickland Locus of Control Scale (Nowicki & Strickland, 1973) is a 40-item measure designed *"to measure generalised expectancies for external and internal control of reinforcement for children"* (Grossman et al, 1992: 535).

The scale, reproduced as Appendix 14, consisted of 40 statements to which students responded Yes or No depending on whether or not they felt the statement applied to themselves. Higher scores on this scale are indicative of external locus of control. It is used to test the hypothesis that children with a high internality are less vulnerable to the effects of stress, and take control of their lives regardless of the circumstances. On the other hand, those with high externality will do nothing to change the course

of their lives because of the belief that their lives are controlled by fate and external forces.

High reliability and validity levels of this locus of control measure have been reported in many studies (Nowicki & Strickland, 1973). They cite *"a split-half reliability of .81 for twelfth graders and a .71 test-retest reliability"* (reported in Grossman et al, 1992: 535).

Administrative Procedure

Like the questionnaires, the Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973) was administered to PNR, PR, and SR children and was completed in a comfortable room at the respective schools. This untimed exercise was supervised by the researcher. Subjects were instructed to follow the directions and answer "yes" or "no" to each of the forty questions on the scale. No question was to be left unanswered or be given two answers.

With respect to SNR children, the researcher wanted to ensure that the scale was completed by the subjects without assistance from anyone else. Hence, each of the twenty-one subjects met with the researcher at an appointed time and place to complete the scale under her supervision.

The data collected from this research instrument were also compared with information obtained from the interviews with respect to respondents' internal/external locus of control orientations as a means of checking the validity of the locus of control information.

Raven's Standard Progressive Matrices

The Standard Progressive Matrices (SPM) scale used in this study was created by J.C.Raven in 1960. Example of the SPM scale is reproduced in Appendix 15. It was designed with the assumption that it would provide a practical means of assessing an

individual's intellectual development, and also to provide a non-verbal test appropriate to make comparisons between individuals with respect to their instant capacities to observe and think clearly.

The SPM scale, which is in the form of a test booklet, is divided into five sets of A,B,C,D and E. Each set consists of twelve problems. There is also a record form which accompanies the scale. On this form recipients recorded their answers to the sixty problems. This scale is used as an untimed test to assess an individual's intellectual capacity at the time it is given , to detect the extent to which he/she can understand

> *meaningless figures presented for observation, see the relations between them, conceive the nature of the figure completing each system of relations presented, and, by doing so, develop a systematic method of reasoning (Raven, 1960: 1).*

Within each of the five sets there are twelve problems totalling sixty in all. The answer to the first problem in each set is easy to discern. The subsequent eleven problems become progressively more difficult. The standard training in the method of working the problems is provided by the order in which the test is presented. Each set provides an opportunity for the child to understand the method and a progressive assessment of the child's capacity for participation in intellectual exercises. The design of the test is very appealing with bold, accurate drawings to sustain the interest of the child.

The tests are intended to cover the entire range of intellectual development from the moment a child has acquired the ability to complete a pattern with missing pieces, to the time he/she is able to use his/her mental capacity to compare and reason by analogy without displaying signs of exhaustion due to the length of the scale.

However, Raven (1960) reminds us that the test is not one of *"general intelligence"*. According to him

> *each problem in the scale is really the "mother" or "source" of a system of thought-hence the name "Progressive Matrices" (p.2).*

Raven reported that *"the scale has a re-test reliability varying, with age, from 0.83 to 0.93"* (p.2). The scale is now being used internationally in comparative studies.

Administrative Procedure

The test books and forms were administered to the subjects of samples 1, 2 and 4 in the same comfortable rooms in their schools where the questionnaires were completed. The scale was given to them as a *"group test"* because the groups varied from three to twenty-nine. The largest group represented the disadvantaged children from the Community College. The instructions, procedure and methods of supervision for the *"group test"* from the *"Guide to the Standard Progressive Matrices Sets A, b, C, D and E"* (Raven, 1960) were followed to assist children in completing this exercise. Each child worked at his/her own speed from the beginning to the end of the test, without being interrupted.

In contrast, the subjects from sample 3 were given the test as an *"individual test"* after a brief interval following the completion of the Nowicki-Strickland Locus of Control Scale. The procedure for administering the *"individual test"* from the Guide was also followed. A person's score on the test is the number of problems he/she solves correctly. To assess the consistency of an individual's work, subtract from his/her score on each of the five sets the expected score on each subscale for the same total on the scale. (The expected scores are given in a table in the Manual.)

> *... If a person's score on one of the sets deviates by more than 2, his total score cannot be accepted at its face value as a consistent estimate if his general capacity for intellectual activity. For general purposes the total score appears to be relatively valid even when discrepancies of more than 2 points occur in the break-up. (Raven et al., 1976; SPM19)*

Case Studies

In this study, four case studies are used to illustrate the theoretical model of educational resilience adopted. Each case represents one of the four sub-samples in

the research design, and is used to generate particularly useful information which will illuminate the findings from the interviews and questionnaire data.

The Content of the Case Studies

The case studies used in this study draw on both qualitative and quantitative data. The case data consist of all relevant information accumulated about each particular case, and these are obtained by combining documentary information, interviews, questionnaires, Standard Progressive Matrices and Nowicki-Strickland Locus of Control scale. These data are used to present the case study. Therefore, the researcher had to ensure that the information for each case is as complete as possible.

Each case study concentrates on the individual child, and uses the child as a unit of analysis thus capturing his/her individuality. Unlike the traditional evaluation methodologies which focus mainly on outcomes (Patton, 1990), these four case studies zero in on each child's progress, tracing his/her experiences, challenges, frustrations and successes and failures, from infancy to the present developmental stage. There was no need to prepare case records because the data from the research instruments had been organised and edited in preparation for the qualitative and quantitative analyses in Chapters VII and VIII. Consequently, the researcher worked directly from both the raw data and organised data in case files to compose the final four case studies, keeping in focus Yin's (1984) methods of "collecting the evidence" for case studies. Hence, three steps were followed in the process of constructing the four case studies:

Step 1 The raw data were assembled from multiple sources of evidence. These consisted of all the information collected on each of the forty children who made up the four sub-samples. From the data, the two non-resilient and two resilient children who seemed most at risk of educational failure because they were at the lowest level of poverty, and were subjected to the most adverse circumstances were selected as the four case studies.

Step 2 A case study data base was formally assembled. This consisted of all the evidence collected on each particular child for which a case study was written.

Step 3 The case study was written in narrative form. This is a descriptive portrayal of each child presented chronologically, which helps the reader to understand the child as a holistic entity, and the reasons why he/she is or is not educationally resilient. As stated by Patton *"each case must be represented and understood as an idiosyncratic manifestation of the phenomenon of interest". (1990: 387)*

Professional Experience

The reseacher's professional experience was used in this study on the basis of her active involvement with disadvantaged children in their social setting for many years prior to and leading to the development of this research study, and experience gained during the period of data collection. Thus, professional experience as an unsystematic form of data collection is divided into two phases.

The first phase was regarded as the researcher's association and personal interaction with children and families of poor SES backgrounds, and her familiarity with of their impoverished conditions. This form of immersion provided useful insights which helped initially in the generation of the research question, and later to enhance the researcher's perception of the participants in the study. It was quite unstructured, and was in the main consisting of mental notes which guided the researcher in selecting the appropriate information from educational documents. The experience gained also helped to enlighten the interviewer on certain issues which arose in interviews with respondents. According to Louisy (1993), this is a form of observation which is *"neither explicitly overt nor covert"* (p. 68), and therefore could normally be regarded in part as the duties of an individual engaged in the

management of an educational institution, and as such was responsible for the welfare of the enrolled students.

The second phase took place during the final stage of the data-collection exercise. It took the form of writing observer's comments during and/or shortly after each interview. These included among other things students' mood, behaviour and facial expression during the interviews, the degree of hostility when talking about certain individuals and other demonstration of emotional upheaval. These feelings and expressions were not captured by the tape recorder, and therefore helped in the analysis and interpretation of the interview data.

However, limited use was made of professional experience in this study as a source of information. This decision was deliberate. By the commencement of this study, the researcher had not only developed an insider's view of what was happening in poor neighbourhoods, but felt what it was like to be a part of the social setting. Thus, the limited use of this method of inquiry helped to minimise the chances of bias which could be attributed to researcher's familiarity with the social context within which the research was conducted.

Preparation for Data Analysis

With respect to interviews, Bogdan and Biklen (1982) define data analysis as

> *the process of systematically searching and arranging the interview transcripts, fieldnotes, and other materials that you accumulate to increase your understanding of them and to enable you to present what you have discovered to others (p. 145).*

Vulliamy and Webb (1992, cited in Louisy, 1993) extended this definition by focusing on the main issues, themes and categories in the data. Essentially this is a data reduction and interpretation exercise which Miles and Huberman (1994) see as a method of analysis that

> *sharpens, sorts, focuses, discards and organises data in such a way that final conclusions can be drawn and verified (p. 11).*

In preparing for analysis, the researcher attempted to bring order to the data by organising it, breaking and arranging it into workable units, searching for patterns and identifying issues of importance. The qualitative data are reduced and transformed through paraphrase. The discussion which follows describes the process used in this preparation.

Stage 1 There were forty recorded interviews. A full transcript of each interview was made, and an identification number was given to each interviewee which was recorded on the transcript. A wide margin was left so that notes could be written in, and all the pages were sequentially numbered.

Stage 2 Each transcription was read, re-read and carefully examined for patterns and relationships, key words and phrases covered by the data and also associated with the protective factor variables represented in the conceptual framework.

Stage 3 Coding categories were established using the key words and phrases. The coding categories were listed according to related topics and began with issues associated with the first developmental stage and ending with the period of development that children are at presently. A number was assigned to each coding category, and it was matched on the unit of data placed under that heading. A separate folder was used for each coding category. There were forty coding categories (See Appendix 16). The original copies of the transcripts remained intact for reference, but photocopies were made to facilitate the coding exercise.

Stage 4 Coding categories presented a way of sorting the descriptive data from the transcriptions. Any unit of data which was related to a particular category was physically separated from the rest of the data using *"The Cut-Up-and-Put-in-Folders Approach"* recommended by Bogdan and Biklen (1982). The children's identification number was recorded on each unit of data. Originally there were fifty categories, but at the end of this exercise some categories were discarded, while others were merged into main categories.

Stage 5 The units of data for each original transcript were regrouped into these pre-established categories, and the relevant information extracted to be incorporated with the observer's comments in order to produce a concise report on each subject. It has been argued that this is not a true representation of what transpired at the interviews, and, according to Louisy (1993) nor are readers aware of what has been omitted or the rationale for inclusion or omission. Louisy cited Powney and Watts (1987) as suggesting that in a situation such as this one, the reader should trust the researcher's integrity to include all the relevant information whether or not they support the working hypotheses. This data reduction offers to the reader a data base which is more organised and structured to retrieve and manage without having to search through hundreds of pages of the raw data.

Stage 6 Ideas generated during the interviews were recorded under "observer's comments" (Bogdan & Biklen, 1982).

These included speculations, important insights, similarities of events and circumstances in the lives of the children, and common patterns of behaviour. In this stage of analytical processing, these observer's comments were formalised, and a concise report on each of the forty (40) children under investigation was written. This also form part of the data base to be used in the actual process of analysis (See Appendix 17).

With respect to the quantitative data, attempts were keyed to disk and prepared for computer analysis using the statistical package SPSS for Windows. After the completion of computer editing and consistency checks, the statistical analysis were carried out. The procedures followed by the researcher are discussed in the following stages.

Stage 1 There were 126 questionnaires, LOC and SPM scales. These were checked to ensure that all items were completed and then sorted according to cases or participants. For each case there were three completed instruments stapled together.

Stage 2 The SPM tests were then marked and assessed for consistency and discrepancies using each case's total score on the test and the expected scores from Tables 1 and 11 in the Manual. The results were entered on each participant's answer sheet. The scores on the LOC scales were also checked and the total was entered at the bottom of each completed scale, and afterwards computed.

Stage 3 Each case was given an identification number and this was entered on each of the three sets of 126 documents beginning with 001 to 126.

Stage 4 A system for recording the data was devised to match the computer programmes which were used for data analysis. Hence, coding sheets were designed and divided into three sections one to code each of the three instruments questionnaires, LOC and SPM respectively. Each coding sheet was used to code two cases. Variable and value labels were assigned to every item on the three instruments, and then each completed instrument was coded accordingly. Under the LOC section each participant's responses to all forty items were coded, and the scores on each of the five sets on the SPM scale and the discrepancy score were coded in the SPM section. Coded sheets were then double checked against questionnaires, LOC and SPM scales to ensure that all items were correctly coded.

Stage 5 Having completed the coding sheets, they were keyed to disk and checked again on the computer for consistency between items. Once the data were "clean", the statistical analyses of the data were undertaken. The particular tests and measurements selected were meant to be the ones that appropriately address the research questions under investigation, and to show differences and similarities between the four sub-samples.

Stage 6 The measurement of socio-economic conditions was a composite "Social Index". For this purpose the

questionnaires were examined to identify relevant social indicators to be used as Social Index items which when scaled, satisfied internal reliability criteria. These were occupational status, type of home, possession of television, refrigerator, gas stove, and having a bathroom. Factor analysis was used to analyse the Social Index items. The design and evaluation of the Social Index is presented in Chapter VII.

Stage 7 Other tests and measurements were used to analyse the LOC and SPM data, and other factors related to primary and secondary resilience such as educational books in the home, occupational status of parents, and crowding. First, distribution statistics were calculated using the histogram, median, mean and standard deviation, in addition the SPM scores were also distributed using the percentile points. However, bivariate analyses were carried out on all variables, first with respect to the primary group and secondly with respect to the secondary group. Nominal scales were analysed by means of crosstabulation, and Chi-square test was used for statistical significance. Ordinal scales were analysed using the Mann-Whitney U test for ranks. Further, the independent samples t-test were used to analyse the SPM and LOC scores. The variables from the series of analyses were then selected for the final logistic regression analyses.

The application of these tests and measurements in the data analysis process will be discussed in the next chapter on analysis of quantitative data.

Summary

This chapter outlined the research methodology adopted in this study. The study is cross-sectional in orientation, and uses both qualitative and quantitative methods. The main sample used in the quantitative analysis, consisted of 126 subjects which were divided into four groups representing different degrees of educational resilience. Four sub-samples of ten were used in the qualitative analysis. The type of sampling used was a combination of stratified-purposeful and criterion sampling. The methods for data collection were documentary information, questionnaires, assessments, (Standard progressive Matrices, and Nowicki-Strickland Locus of Control), in-depth interviews and professional experience. The Standard Progressive Matrices and the Locus of Control scale are validated instruments, however, the questionnaire and interview schedules were piloted to increase their validity. To complete the data analysis, four case studies were used representing each of the four sub-samples.

CHAPTER VII

FINDINGS FROM QUESTIONNAIRE SURVEY: FACTORS ASSOCIATED WITH EDUCATIONAL RESILIENCE

... what is generally true for an entire group, when only a few members of the group are actually measured.
McCall, 1990: 4

Introduction

Questionnaire data obtained on seventy-six children at the end of, or in Standards 4 & 5 (Grades 7 & 8) of their primary education and fifty children at the end of their secondary education were used to identify factors which appeared to increase the chances of educational resilience among these severely disadvantaged St. Lucian children. These data included the children's personal characteristics (gender, age in days, age position of the child in the family, general ability measured by Standard Progressive Matrices score, and locus of control); indicators of the quality of the home environment (Social Index score as a measure of socio-economic status, sharing a bedroom, language used in the home (English or patois), availability of educational books in the home, number of children in the family under eighteen years of age, number of adults in the household, occupancy density in the home (persons per room) as a measure of crowding; and parental factors (whether or not the father lived at home, whether or not the parents were employed, and the occupational status of the parents (managerial/clerical, skilled manual, semi-skilled, unskilled/not employed.

This chapter presents the statistical analyses of these data and includes bivariate analyses which were carried out with all the variables mentioned above, first with respect to the primary group and second with respect to the secondary group. The main approach for analysing nominal scale variables was by using crosstabulation and the Chi-square test for statistical significance, ordinal scales (i.e. Social Index score, child's age, numbers of children and adults, crowding index and occupational status) were analysed by means of the Mann-Whitney U test for ranks. The SPM and Locus of Control scores were analysed using the independent samples t-test. The null hypothesis with all the tests was that there was no difference between the resilient and non-resilient children with respect to each independent variable so two-tailed significance tests were applied. As the samples were small, the level of probability at which the null hypothesis would be rejected was $p < .05$.

The outcome of this series of analyses was that few proved to be statistically significant. The single most important factor with regard to both primary and secondary resilience was general cognitive ability as measured by the Standard Progressive Matrices test. Firstly, characteristics of the four resilience groups will be described.

Sample Characteristics

For the present study, students were drawn from the primary, secondary and post-secondary schools and also from secondary school leavers. Table 4 defines the four groups.

Table 4: Definition of the resilience groups

Resilience Groups	**Definition**
Retained in primary school	These children failed to pass the CEE at the age of about 11 + years and consequently are retained in primary school in Standards 5 and 6 insteading of progressing on to secondary education. There were 33 children (11 males and 22 females) and are the "primary non-resilient" group.
First year secondary	These children succeeded in passing the CEE and were enrolled in Form 1 in the 14 secondary schools on the island. There were 43 children (20 males and 23 females) also aged about 11 + and are the "primmary resilient" group.
Left secondary	These children were primary resilient but failed the external CXC examinations, and consequently could not obtain a place at the Community College. There were 21 children (9 males and 11 females) and are the "secondary non-resilient" group.
First year College	These children were primary resilient and performed exceptionally well on the CXC examinations to be able to secure a place at the Community College. They are between the ages of 16 and 18. There were 29 children (12 males and 17 females) and are the "secondary resilient " group.

Table 5. Distribution of resilience groups

Resilience Groups	N	%
Retained in Primary school	33	26.2
First Year secondary	43	34.1
Left secondary	21	16.2
First year college	29	23.0
Total	126	100.0

These four groups of 126 students represent increasing degrees of resilience in that they had all lived in similarly deprived neighbourhoods known to have a proportionately very large socially deprived population, but reached different levels of the school system. This population is quite homogeneous, and is made up of predominantly Blacks and a significant minority of Indians. This homogeneity is reflected in the sample with 85.7% Black, 7.9% of Indian descent and the remainder of mixed races.

Most parents were not well educated: 73.8% of mothers and 71.4% of fathers had some primary education; 19.0% of mothers and 17.6% of fathers had earned a Standard VI School Leaving Certificate; 11% of parents had never attended school. Although 21.4% of mothers and 16.5% of fathers received some secondary education, yet most of them failed to graduate, and only 5.2% of them attained CXC certificates.

From the main sample 37.3% of mothers were unemployed, 35.7% of them worked full-time, and an additional 22.7% worked part-time. Of the fathers (41.3%) were in full-time employment, 15.1% worked part-time and 9.5% were unemployed. In 25.4% of the sample there were no father figures. Thus, the entire sample are of low SES backgrounds, with 65.9% of the parents employed in unskilled manual or semi-skilled manual positions. Due to their economically disadvantaged situation, all the children were considered at risk for maladaptative development and poor educational progress.

Two distinct age groups or cohorts were created by the research design: one towards the end of primary education with the age range from 13 to 14 years, and the other

at the end of secondary education with age ranging from 17 to 19 years. These two age groups were each subdivided into two further groups of the same age resulting in the formation of the four groups. The mean ages are shown in Table 6.

Table 6. Ages of resilience groups

Resilience groups	N	Mean (years)	Standard deviation
Retained in primary school	33	13.1	.54
First year secondary	43	13.2	.50
Left secondary	21	18.5	.71
First year college	21	18.2	.75

Test for difference between primary groups: t value = -.38; df = 74; p = .702
Test for difference between secondary groups: t value = -1.40; df = 48; p = .168

Student's t-test confirmed that there was no significant age difference between the first two or the last two groups. However, the 5 years difference between the first two groups and the last two groups represents the average duration of secondary education.

The school system (both primary and secondary) has a slight majority (59%) of girls, and the four groups reflected that difference. Previous research has found higher rates of resilience among girls than boys (Dunn & Kendrick 1980; Osborn, 1990; Rutter 1980; Werner & Smith, 1982). However, there were no gender differences between the resilience groups used in this study. Table 7 shows the resilience groups by gender.

Table 7. Resilience groups by gender

	Gender		
Resilience groups	**Boy**	**Girl**	**Total (N = 100%)**
Retained in primary school %	45.5	54.5	33
First year secondary %	46.5	53.5	43
Left secondary %	47.5	52.4	21
First year college %	44.8	55.2	29
All %	46.0	54.0	126

Chi-Square = .05 (3df) p > .05

These analyses suggest a high degree of homogeneity between these four groups in terms of their social and family circumstances.

FACTORS RELATED TO RESILIENCE

Social Index

Although all the children in the sample lived in poor residential neighbourhoods, it was inevitable that some families were relatively better off than others in terms of their quality of life.

To measure differences in socio-economic conditions a technique was used that had been developed for a British cohort study (Osborn, 1987). This makes use of a number of social indicators which are combined together in a scale. The resulting "Social Index" has proved to be a sensitive indicator of social differences and is particularly useful in analyses where it is desired to control for the intervening effects of social inequality when investigating associations between other factors.

The original Social Index scale could not be used in the present study as its constituent items did not carry the same implications across all cultures and social situations. It was necessary, therefore, to identify relevant social indicators for this particular study and compile them into a new Social Index. A large number of items obtained from the questionnaires were examined as potential Social Index items and those in Table 8.1 best satisfied internal reliability criteria. Table 8.1 also gives the frequency distributions for all the Social Index items and the item component loadings obtained from a principal component analysis described below.

Table 8.1 Frequency distributions of Social Index items and principal component analysis

Item	N	%	Component loading
1. Occupational status			
Not employed	9	7.1	
Unskilled manual	17	13.5	
Semi-skilled manual	66	52.4	
Skilled manual	25	19.8	
Clerical	9	7.1	.42
2. Type of house			
Wooden	64	50.8	
Wall and wood	23	18.3	
Wall	39	31.0	.57
3. Possession of TV			
None	51	40.5	
Monochrome	47	37.3	
Colour	28	22.2	.67
4. Possession of refrigeration			
No	63	50.0	
Yes	63	50.0	.70
5. Has a bathroom			
No	115	91.3	
Yes	11	8.7	.44
6. Has a gas stove			
No	11	8.7	
Yes	115	91.3	.53
Total	126	100	

Principal component analysis is a method used to summarise a given set of observed variables by a smaller number of variables. A series of principal component analyses was carried out on a wider range of social indicators with the aim of identifying a basic set of items indicative of a single underlying construct or component. The items in Table 8.1 provided the best solution in that all the component loadings exceeded .4, one component explained 31.8% of the variance among all the items and there was only one further component suggested by the criterion of having an Eigenvalue greater than one (see Table 8.2). As stated by Kim and Muller,

> *one of the most popular criteria for addressing the number of factors question is to retain factors with eigenvalues greater than 1 when the correlational (not adjusted) matrix is decomposed (1978: 43)*

The eigenvalue may be used both as a criterion for *"determining the number of factors to extract and as a measure of variance accounted for by a given dimension"* (Kim & Muller, 1978: 83).

Table 8.2 Eigenvalues from the principal component analysis

Component	Eigenvalue	Percentage of variance	Cumulative percentage
1	1.91	31.8	31.8
2	1.04	17.4	49.2
3	.92	15.3	64.4

The second component was not extracted from the analysis because its Eigenvalue barely exceeded 1.0 and the resulting two factor solution did not give a more meaningful result.. The structure described in Table 8.1 was therefore deemed the optimal solution.

A further check on the internal reliability of the Social Index as defined in Table 8.1 was given by a total scale Cronbach's Alpha coefficient of .57 which is an acceptable level of reliability. Also, the exclusion of any item from the scale resulted in a reduced Alpha coefficient which indicated that all items in the scale contributed significantly to the latent construct.

Intellectual Ability

Raven's Standard Progressive Matrices Scale (SPM), a widely utilised test, was selected as a measure of intellectual ability because it is completely non-verbal and therefore reasonably transferable into different cultural contexts, it is simple and quick to administer, and has acceptable levels of validity and reliability (Raven et al., 1976). Besides, acceptable psychometric properties of the SPM have been firmly established in several research investigations (Raven et al., 1976). Comparisons with the Binet and Wechsler scales produced correlations of between .54 and .86 although cross-cultural comparisons with non- English speaking children produced somewhat

lower validity correlations (.3 to .68). Test-retest reliability trials with children aged between 12 and 14 years produced a reliability coefficient of .88, whilst split half correlations are reported of at least .9.

As described in Chapter VI, The SPM is arranged as five sets of twelve problems. Each set begins with a simple problem and then develops a theme which grows increasingly more difficult. As a consequence, it is possible to deduce the consistency of a child's *"intellectual activity in five successive lines of thinking" (Raven 1966: 56)*. Thus, a child's ability for coherent perception and analogical reasoning in relation to other children can be assessed at the time of the test, irrespective of his/her past experience or his/her ability to communicate verbally. However, it is not possible to deduce a child's speed of intellectual work from the number of problems he/she solves in a fixed time (Raven, 1966).

Each set or subscale was scored separately, the score being the number of the correct answers out of the twelve items in the subscale. A test for the consistency of an individual's score is given as follows:

> *By substracting (sic) from a person's score on each set for the same total score on the scale, the consistency of his work can be assessed. (The expected scores are given in a table in the Manual.) ... If a person's score on one of the sets deviates by more than 2,his total score on the scale cannot be accepted at its face value as a consistent estimate of his general capacity for intellectual activity. For general purposes the total score appears to be relatively valid even when discrepancies of more than 2 points occur in the break-up. (Raven, 1966: 10)*

This suggests that for the purpose of research, observed-expected discrepancies of up to 3 could be allowed. Examination of the present data showed 7 cases with discrepancies of more than 3 on at least one set and 2 cases with total score of less than 15 (which was below the reliable range of the table of expected values) so these 9 cases were excluded from all further analysis involving SPM. Despite the fact that this sample was selected from disadvantaged neighbourhoods of St. Lucia, the distribution of SPM scores was surprisingly close to the published norms for the 13

to 25 year age group (Raven et al., 1976, Table SPM XIV) as shown in Table 9.

Table 9. Distribution of Standard Progressive Matrices scores

Percentile points	5	10	25	50	75	90	95	$\bar{X}$ N
Norms (13-25 years)	25	30	37	44	49	54	55	
St Lucia sample (13 & 18 years	29	34	39	44	49	52	55	43.2 117

Without independent age norms it was not possible to disentangle age effects from resilience effects between the two age groups. However, Raven noted that

> *the capacity to form comparisons and reason by analogy increases rapidly during childhood, appears to have reached its maximum somewhere about the age of 14, stays relatively constant for about 10 years, and then begins to decline, slowly but with remarkable uniformity right through old age. (1966: 57)*

Nevertheless, resilient children are frequently found to have higher measured intelligence than non-resilient children (Garmezy et al., 1984; Masten et al., 1988; Zigler & Farber, 1985). Tables 10 and 11 show that this was also true for this St. Lucia sample. The implication of this finding is consistent with the findings of research conducted by Cicchetti et al (1993). The analysis of variance (ANOVA) was used to compare the mean SPM scores of the four resilience groups.

Table 10. Primary resilience by Standard Progressive Matrices

	N	$\bar{x}$	SD	SE of $\bar{x}$
Non-resilient	27	36.5	7.9	1.5
Resilient	42	41.6	5.5	0.9

Mean difference = -5.1; 95% CI for difference = -8.3 to - 1.8
t value -3.13; df = -67; p = .003; SE of difference = 1.6

Table 11 . Secondary resilience by Standard Progressive Matrices

	N	$\bar{x}$	SD	SE of $\bar{x}$
Non-resilient	21	45.1	4.4	1.0
Resilient	27	50.9	4.2	0.8

Mean difference = -5.8; 95% CI for difference = -8.3 to -3.2
t value = -4.6; df = 46; p < .0005; SE of difference = 1.2

The results show a highly significant upward trend in levels of intelligence from the least resilient group to the most resilient group. These results are consistent with several earlier findings from research studies conducted with different populations, establishing that intelligence relates to resilience and as such, protects against stress, and is a compensator or moderator of adaptation in high risk situations (Garmezy et al, 1984; Luthar, 1991; Masten et al, 1988).

Tables 10 and 11 also show that the resilient children achieved a higher level of general ability amounting to more than 5 points on the scale which is equivalent to one standard deviation in SPM score. Hence, the trend across all four groups was roughly linear. The findings are interpreted as being due to the different levels of intelligence within the resilience groups. However, the ability to do well on the SPM can be partly attributed to experience (that is, not inherited). Also, the higher scores in the resilient groups may be partly due to protective factors in their lives. Note that any age effect may be confounded with a hypothesised "resilience" effect as observed above in the discussion of the SPM scale. It is noteworthy that the secondary non-resilient group were primary resilient children who completed secondary education, and did not drop out. Some of the primary resilient group will probably achieve this also, that is those with higher intelligence. Also, from both these points, it can easily be seen that the primary resilient group contains potential to become secondary resilient as well as secondary non-resilient.

Locus of Control

As mentioned in Chapter VI, the Nowicki and Strickland Locus of Control 40-item scale was used to measure the extent to which children were internal or external in orientation. (The scale is reproduced in full in Appendix 14.) The version of the scale used in this study was selected as the one most appropriate for this age group. High validity and reliability levels of this measure have been reported in many research studies. For example, Nowicki and Strickland reported a split-half reliability of .81 for twelfth graders (Form 5 students) and a .71 test-retest reliability (Nowicki & Strickland, 1973).

The total LOC score was computed by adding a weight of 1 to each item to which the child responded in an "external" direction. Thus, high scores are indicative of high externality and low scores indicate an internal locus of control. The total scale score had a mean of 13.4, standard deviation of 4.8, and a range from 2 to 24 points.

It was hypothesised that children with internal locus of control were more likely to be resilient than those who were externally oriented. This hypothesis was supported by the results shown in Tables 12 and 13. Support for this finding is evident in studies suggesting that children with high internality who have experienced stressful life events, tend to demonstrate coping skills to master the challenging situations which they encounter (Luthar & Zigler, 1988; Werner & Smith, 1982).

Table 12. Primary resilience by Locus of Control

	N	x	SD	SE of x
Non-resilient	33	16.2	3.7	0.6
Resilient	43	13.8	4.0	0.6

Mean difference = 2.4; 95% CI for difference = 0.6 to 4.2
t value = 2.6; df = 74; p = .010; SE of difference = 0.9

Table 13. Secondary resilience by Locus of Control

	N	x	SD	SE of x
Non-resilient	21	13.7	4.9	1.1
Resilient	29	9.5	4.6	0.9

Mean difference = 4.2; 95% CI for difference = 1.5 to 6.9
t value 3.1; df = 48; p = .003; SE of difference = 1.4

Tables 12 and 13 show significant associations between locus of control and resilience at both primary and secondary stages such that resilient children were more likely to be inner directed. This analysis suggests a relationship between self-motivation and level of schooling in that it is less important to become self-motivated at the early stages of education, but it becomes more important at secondary school level. Thus, the children from the highest level of education may have to depend more on their internal control of reinforcement in order to increase their chances of educational success. These statistical findings on the LOC scale will be compared in the next chapter with the interview data on locus of control.

Table 14 shows the relationships between SPM, LOC and Social Index. The relatively strong correlation between SPM and LOC (r = .49) as shown in Table 14 means that these two factors share part of the variation in the probability of a child being resilient. This is investigated further in the logistic regressions which follow below.

Relationships between SPM, Locus of Control and Social Index

SPM, Locus of Control and Social Index were hypothesised as major "resource/protective factors" in the explanation of resilience. However, it was likely that they were intercorrelated and Table 14 indicates that this was indeed the case.

Table 14. Correlations between SPM, Locus of Control and Social Index

	SPM	LOC	Social Index
SPM	1.00	$-.49_{p<.0005}$	$.25_{p=.006}$
LOC		1.00	$-.20_{p=.031}$
Social Index			1.00

The results in Table 14 show a strong association between SPM and Locus of Control such that intelligent children were more likely to make internal attributions. However, given the strong correlation between LOC and intelligence described above, at least part of the effect shown in Tables 12 and 13 may be due to intelligence. Conversely, part of the effect attributed to SPM in Tables 10 and 11 was due to LOC.

There was also a tendency for the children from the relatively better off families to show greater intelligence. This finding that demographic variables were related to intelligence, can be compared with results of previous studies (Sameroff et al, 1987; Rutter & Quinton, 1977) that have provided evidence for the high risk nature of low socio-economic conditions in the lives of economically dsisadvantaged children. However, there was a weak correlation between Social Index and Locus of Control, which disappeared after controlling for intelligence.

Table 15. Mann-Whitney U test for difference in ranks between resilient and non-resilient groups. (Cells contain mean ranks for groups)

	Primary			Secondary		
Factor	Non-resilient	Resilient	Sig	Non-resilient	Resilient	Sig
	(N=33)	(N-43)		(N=21)	(N=29)	
Age in days	36.9	39.7	p=.586	29.7	22.5	p=.085
Social Index score	34.0	41.9	p=.121	19.4	29.9	p=.012
Crowding index	43.5	34.7	p=.083	27.2	24.2	p=.471
Occupational status	34.3	41.8	p=.108	20.8	28.9	p=.037
Children < 18 years	40.0	37.4	p=.602	26.2	25.0	p=.764
Adults > 17 years	38.9	38.2	p=.884	25.6	25.5	p=.984

Only two statistically significant results were found and both of these related to secondary resilience. Resilience was associated with higher socio-economic (Social Index score) and higher occupational status (at least one parent in a skilled, clerical or managerial job).

Occupational status, however, is also an indicator of SES and so both these variables are suggesting that resilient children, although coming from a severely disadvantaged residential neighbourhood, were slightly better off in socio-economic terms than were their peers from similar neighbourhoods. In addition, however, the child's age approached statistical significance at the secondary level (the resilient children tended to be younger), and the crowding index approached statistical significance at the primary level (the resilient children were more likely to come from less crowded homes).

Among the variables analysed by means of crosstabulation, the only factor which even approached statistical significance was whether or not there were educational books in the home. This was used as an indicator of the family's educational commitment. Only five (7%) children in the primary and eleven (22%) children in the secondary group reported that they had educational books at home. Tables 16 and 17 show that larger proportions of resilient than non-resilient children had educational books at home although the small numbers involved resulted in the difference failing to achieve statistical significance.

Table 16: Primary resilience by educational books in the home

Resilience classification	Educational books in the home: No	Yes	All
	%	%	%
Non-resilient	45.1	20.0	43.4
Resilient	54.9	80.0	56.6
Total (N=100%)	71	5	76

Fisher's exact test: p=.381
(Chi-square test unreliable due to small expected frequencies)

Table 17: Secondary resilience by educational books in the home

Resilience classification	Educational books in the home		
	No	Yes	All
	%	%	%
Non-resilient	48.7	18.2	42.0
Resilient	51.3	81.8	58.0
Total (N=100%)	39	11	50

Fisher's exact test: p=.092
(Chi-square test unreliable due to small expected frequencies)

One of the main purposes of these bivariate analyses was to identify independent variables which could be built into a model using logistic regression with the aim of determining which factors were most strongly associated with educational resilience. Although not all of the factors analysed achieved the $p < .05$ level of significance, it was decided to include in the regressions those which approached this level as well as those which achieved it. The logic behind this decision was that after statistical adjustment for other factors in the analysis, those showing only a weak bivariate association with resilience may become significant.

This series of analyses resulted in the following variables being selected for further logistic regression analysis: Standard Progressive Matrices, Locus of Control, Social Index score, crowding index, occupational status, child's age, and educational books in the home. The results of these analyses are summarised in Tables 18 and 19.

These analyses show the independent effect on the probability of being resilient of each variable in the analysis after statistical adjustment for the effects of the other variables in the analysis. The regression coefficient (B) is the increase in log odds for a unit increase in the independent variable. The odds ratio is the probability of being resilient divided by the probability of not being resilient and is equal to the exponential of B (e^B). Odds ratios greater than one indicate increased odds of resilience associated with increasing values of the independent variable. Odds ratio less than one indicate decreased odds of resilience associated with increasing values

of the independent variable. R is an approximate partial correlation coefficient which varies between -1 and +1 and indicates the relative strength of association between each independent variable and the odds of being in the resilient group. Larger values of R suggests greater importance for resilience. The sign, as with all correlation coefficients and the regression coefficient (B), indicates the direction of the relationship. The -2 Log Likelihood Ratio follows a Chi-square distribution from which the probability statistic for each independent variable is estimated. A non-significant goodness test indicates that the data fits the model well and that it is not necessary to investigate interaction terms. The proportion of cases correctly classified is based on a comparison between the predicted and observed distributions of resilient and non-resilient cases. This is an indication of how well the data fits the model using these particular variables.

Table 18. Factors related to primary resilience

Logistic regression

Factors	B	SE(B)	Exp(B) Odds Ratio	R	-2 Log Likelihood Ratio	df	Significance
SPM	.13	.05	1.14	.25	9.7	1	p=.0018
Crowding	-.56	.31	0.57	-.12	4.7	1	p=.0300
Constant	-3.14	1.82					

Goodness of fit (-2 Log Likelihood) =78.4; df=65; p=.12
Proportion of all cases correctly classified = 68.1%
Proportion of resilient children correctly classified = 83.3%

Table 18 gives the results for the primary resilience group. The only variables which achieved independent statistical significance were the child's general ability and the level of crowding in the home. Being above average ability for children of similar age and social background and living in less crowded accommodation were the factors associated with increased probability of resilience. The regression equation from this analysis is as follows:

$$Z = -3.14 + .13(SPM) - .56(Crowding)$$

The probability of resilience can then be calculated from the following expression:

$$\text{Prob(resilience)} = \frac{1}{1+e^{-z}}$$

A child who had a SPM score of 47 (which is about half a standard deviation above the mean) and lived in accommodation where there were only two persons per room (the mean was 2.5) was likely to have been in the resilient group:

$$Z = -3.14+.13(47)-.56(2) = 1.85$$

$$\text{Prob (resilience)} = \frac{1}{1+e^{-1.85}}$$

This indicates that the child in this example had an 86% chance of being resilient at the primary education stage based on the two predictor variables. Children of lower than average ability or who were living in overcrowded homes had a less than even chance of resilience. It is not possible from the regression coefficient to decide which of these two variables had the greater impact on resilience because a unit increase in general ability does not carry the same meaning as a unit increase in crowding. However, the partial regression coefficient (R) suggests that SPM explained more variance in the probability of resilience (R=.25) than did crowding (R=-.12).

When interpreting the results of this analysis, it is essential not to conclude that the factors that failed to achieve statistical significance were of no importance. This could be due simply to sampling error associated with the small sample size and also to the fact that many of the social indicators were intercorrelated so that the emergence of crowding rather than, for example, the Social Index, as a factor in resilience may have been partly by chance. Similarly, Locus of Control is strongly correlated with SPM (r=.49) therefore part of the effect attributed to the latter could equally have been due to the former. The best interpretation of these results, therefore, is that the probability of achieving resilience at the primary education stage is increased in children of above average general ability and whose social circumstances are somewhat better than those of others living in similar neighbourhoods.

Table 19. Factors related to secondary resilience

					Logistic regression		
Factor	B	SE(B)	Exp(B) Odds ration	R	-2 Log Likelihood Ratio	df	Significance
SPM	031	.11	1.36	.31	12.5	1	p=.0004
LOC	-.21	.11	.81	-.17	5.2	1	p=.0230
Books	2.55	1.30	12.83	.11	4.7	1	p=.0309
Occup. status	.79	.47	2.21	.17	3.3	1	p=.0694
Constant	-12.54	5.15					

Goodness of fit(-2 Log Likelihood) = 36.1; df = 42; p = .73
Proportion of all cases correctly classified = 81.2%
Proportion of resilient children correctly classified = 85.2%

The findings in Table 19 resulting from the analysis for the secondary education group show more factors having a significant effect on the probability of resilience. In addition to general ability (SPM score), internal Locus of Control and having educational books in the home also increased the probability of educational resilience. Occupational status did not achieve statistical significance itself, but its presence in the regression improved the model in terms of the proportion of children correctly classified without reducing the goodness of fit. The partial correlation coefficient (R) suggests that general cognitive ability (SPM) was more strongly associated with resilience than were the other independent variables in the analysis.

These results suggest that high risk children at the end of their secondary education were more likely to successfully gain entry to a community college if they were above average general ability, had internal Locus of Control, had educational books in the home, and at least one parent employed in a skilled or clerical occupation (although there was a 7% probability that the last effect occurred by chance).

The small sample size and the fact that many of the independent variables were intercorrelated to some extent means that comparisons between the analyses at the primary and secondary education stages should be treated with caution. Nevertheless, they do tend to reflect the general pattern of findings which emerged from the interviews with the subsamples of children (Chapters VIII and IX). In particular it appears that resilience in the primary stage was dependent on the child having a

supportive home environment which would have been more likely in a less crowded home setting. Resilience at the secondary education stage was also dependent on having home resources (educational books in the home and parents in higher status occupations) but in addition was more likely in children with inner directed locus of control. Self motivation was almost certainly important for resilience in the primary education period but Locus of Control did not retain its statistical significance after general ability had been taken into account. At the secondary education stage, however, Locus of Control retained a significant independent effect. This suggests that inner directedness and self-determination was even more important at the secondary stage and statements to this effect from the secondary resilient children who were interviewed support this conclusion.

The most significant finding from the analysis of the questionnaire data which could not be derived from the interviews with the children themselves was the crucial importance for resilience of having above average general cognitive ability (i.e. within this social group). Whilst general cognitive ability as measured by the Standard Progressive Matrices test is partly determined through children's educational experiences at school and at home, there is also a genetic element which may contribute to optimal developmental progress from an early age and thereby predispose children born into a high risk environment to avoid the adverse outcomes associated with such risk. Superior intelligence of itself is unlikely to necessarily result in educational resilience but requires a nurturing social environment in which it can flourish. Parents who are themselves successfully copinng with stressful social circumstances may be able to provide their children with the necessary support to enable their optimal developmental progress. One explanation for childhood resilience, therefore, may be having resilient parents. Conversely, the results of this analysis suggest that without a reasonable level of intelligence a child born into a high risk social environment is unlikely to achieve educational resilience unless there is very substantial social support.

Summary

The results of the analyses presented indicated a strong correlation between the variables intelligence and locus of control. With respect to the primary resilience groups, intelligence and crowding were significant indicators of resilience. That is, above average general ability and a supportive and less crowded home increased the chances of a child being resilient. Locus of control was also important in primary resilience, but it did not retain its statistical significance after intelligence was taken into account.

With respect to the secondary resilience groups, intelligence, internal locus of control, educational books in the home, and occupational status of parents were predictors of educational resilience, with above average general cognitive ability being the strongest predictor and parents' occupational status having the least effect. However, unlike the primary resilient group, locus of control retained its significant independent effect. This suggests that self motivation and inner directedness were more important at the secondary education stage than the primary education stage.

Gender was not found to be a significant factor in increasing resilience as other studies on different populations have suggested. This could be due to the relatively small size of the study compared with the other studies cited, but also the different definitions of vulnerability and competence as well as the different socio-cultural context.

CHAPTER VIII

FINDINGS FROM INTERVIEWS: FACTORS HYPOTHESISED AS INCREASING THE CHANCES OF EDUCATIONAL RESILIENCE

What you do not see you cannot describe.
What you cannot describe you cannot interpret.
But because you can describe something
does not mean you can interpret it.
Halcolm's Laws, (cited in Patton, 1990)

Introduction

I acknowledge the fact that by using cross-sectional study, which seeks to associate early events with current outcomes, there will be difficult methodological problems and limitations to the database. The in-depth interviews, carried out with ten students from each of the four samples representing (1) primary non-resilient (PNR), (2) primary resilient (PR), (3) secondary non-resilient (SNR), and (4) secondary resilient (SR), were retrospective in orientation. They allowed for the meaning of the child's life, social world and experiences from his/her current perspective. Each child answered questions about early attachment, relationships, mother, father, family, teachers and self, and how these related to his/her educational experiences.

The methodological problem with such retrospective interviews is that students' knowledge with regard to their educational success and failures can affect their perceptions of who and what were responsible for the way things eventually turned out for them. Besides, assessing children's experiences and behaviour from retrospective information also presents considerable analytical difficulties. Ideally, a longitudinal study would have been preferable, but time and financial constraints ruled this out. Nevertheless, I did my utmost best under the circumstances to "recapture" the life history of subjects in the four sub-samples, by helping them through the "journey" of recalling their experiences from infancy to their present developmental stage. For some it was a painful journey into the past, therefore I tried to ensure that a positive and trusting atmosphere prevailed. This proved relatively easy due to my thirty years working experience with students of low socio-economic status. Some of them cried and became very emotional while remembering their unhappy and distressful childhood, a few were candidly infuriated at their parents and disparaged them, while others kept a straight face and suggested that the

painful experiences did not adversely affect them. For others, growing up was the happiest and most exciting time of their lives, and welcomed the opportunity to talk about it.

The major impressions of these interviews were the openness of the children and their vivid recollection of past events and experiences. In most of the cases their responses were quite fluent but with a few grammatical errors (due to the patois influence). Nearly all could remember most of their childhood. Thus, interviewing the children was very informative, and provided interesting insights into the kinds of factor likely to increase the chances of educational resilience in the Caribbean context. However, because of the cross-sectional design used and the retrospective nature of the interviews, conclusions drawn from the data regarding the causal relationships between stressors/protective factors and developmental outcomes will be suggestive rather than definitive.

The theoretical model of resilience applied in the analysis of the interview data is outlined in Chapter V. The model defines "competence" in terms of educational success, and educationally resilient children as those who, despite being at risk of educational failure due to adverse socio-economic circumstances achieve educational success. The factors hypothesised as increasing children's chances of educational success are analysed and discussed below.

Did early attachment contribute to the intellectual development of the child?

It is widely accepted that secure early attachment relationships have a very strong anxiety-reducing function (Bowlby, 1969); also, that it is part of the mediating process where resilience is identified. Conversely, insecure attachment of the child to its parents has been identified as a psychosocial deprivation (Cicchetti, 1990). However, the process of attachment allows a parent or primary caregiver and child to establish a meaningful and intimate relationship which has a long-lasting positive effect on the development of the child. It can be argued from a developmental perspective, that the quality of the child's attachment and early relationships in the

first few years of life has an important effect on how well he/she develops socially, emotionally and intellectually. Secure early attachment also provides the foundation for the future psychological development of the child. In fact, it is the view of Cicchetti (1990) that attachment is an important element of the child's psychological equipment in his/her struggle with life's adversities. It is believed that a child who experiences the intimacy of attachment grows to feel safe, wanted, confident, secured and self-assured, and worthwhile about his/her life; all of which are core themes in this chapter.

Thus, from a developmental perspective, these deep feelings of security will positively assist the child throughout the childhood, adolescence and young adult developmental stages into becoming "good copers". There is evidence to suggest that such children can achieve academic success. In contrast, children who do not form secure early attachments with a primary caregiver, will not experience the dynamic attachment concepts of love, security and self-confidence. This situation can increase stress in children and reduce their coping capacity making them more vulnerable to behaviour maladaptation and educational failure.

These findings were confirmed in children's responses to questions on the first few years of their life, and the quality of attachment and child-rearing practices experienced during that period. These questions were posed to both the educationally-resilient and the non-resilient groups.

Children's relationship with primary caregiver

The attachment theory suggests that there is a sensitive phase in early life during which infants have the capacity to make selective secure attachments with their parents or other primary caregiver; a relationship which can provide the foundation for later social relationship (Bowlby, 1980), and social functioning. A child who lacks the sense of security resulting from early attachment may be more vulnerable to stress and less likely to cope successfully with life's challenges.

In all four samples the mother was not always the primary care-giver. With the PNR group this role was conducted by three mothers, four grandmothers, one brother, one sister and one father. From that sample, eight out of ten reported that they had not formed any secure early attachment with their primary caregiver or their mother.

> *You see Miss, she is my mother; yes, she gave birth to me and I should feel something for her, but I don't because when I needed her when I was small she was never at my home; my big sister was the one... (PNR/F#006)*

> *I was not close to nobody when I was small... How could I anyway when my mother would go out all the time drinking and leave me and the others... (PNR/F#003)*

> *Not good. I remember from the time I was small my mother would beat me very often all over my body with whatever she can get her hands on, even shoes... I could not like her; and I think she hated me too. (PNR/M#002)*

> *... I don't know; Well... maybe if she use to be at home a lot, maybe I would form some kinda friendship with her. But like I tell you she was never at home a lot. (PNR/F#026)*

The majority of mothers did not seem to have the time for full time responsibility of child-rearing, and therefore passed on that responsibility to someone else within the family. This secondary care-giver did not particularly demonstrate any kind of affection towards them. These periods of maternal separation from the child can cause distress and chaotic care. However, although children reported that these caregiver substitutes would feed, change and put them to sleep, this loving touch and show of affection seemed "alien" to them. It was as if feeding and caretaking were not sufficient in themselves to develop secure attachments.

A child whose mother was psychotic and who came from a family with a medical history of psychosis, also experienced some degree of desertion. She recalled being left alone for long periods from infancy.

> *My mother is crazy and would always leave me by myself because she did not want me to be with anyone else. I had nobody else to be with so I was by myself most of the time, from small. So I never really get close to anybody. I felt neglected. (PNR/F#010)*

Student #003 was the only PNR child where the father played the role of primary caregiver because of the mother's frequent absence from the home. Apparently no secure attachment was formed. According to the child:

> *My father was not a loving person. I did not like the way he use to treat me. He was always quarrelling and shouting after me as if he is in a rage, and sometimes he would beat me when he had to look after me. (PNR/F#003)*

According to the evidence, the general feeling among the eight PNR children was one of "total neglect". Support for this finding is found in Giavanni and Billingley (1970). It would seem then, that as long as the primary caregiver, whom children assume should always be their mother, was not present most of the time to attend to their needs, forming a secure attachment or bond with them was not always possible to achieve. However, it can be argued that bonds do not necessarily develop with the individual who spends the most time with the child. Nevertheless, it was quite evident that they felt unloved and insecure as young children, and still feel the same today as adolescents. These feelings can have a psychological effect on children by increasing their levels of emotional distress, thereby making them behave in an abnormal manner. This abnormality is demonstrated by externalising symptoms (e.g. being over-aggressive) or internalising ones (e.g. anxiety, depression), a distinction frequently made by developmental psychopathologists (e.g. Achenbach & Edelbrock, 1978). But the evidence showed that most of the members of that sample were action-oriented and attempted to cope with the stresses that they were under by *"responding to the "symptoms" rather than to the source of the stress"* (Robson et al, 1995: 172). This was evident in children's aggressive and disruptive behaviour which, by their own admission, were demonstrated in fights and classroom disturbances.

However, two PNR children claimed to have formed an attachment with their primary caregiver. Yet it was not the type of attachment where the child had deep feelings of security or where all needs were met. According to one:

> *I was closer to my grandmother because she was the one who took better care of me, not my mother. I was always sick as a baby and my*

mother would always leave me for my grandmother to take care of and she would go out. Anyway, I felt safer with my grandmother than anybody else, but she could not stay with me all the time. She had her own children to look after. (PNR/F#009)

In that case the implication is that the child's needs were only partially met by the infrequent nature of the grandmother's care. But if the grandmother was in a position to provide the attention, love and care which the child needed on a continuous basis, then the child's chances of achieving future intellectual development would have increased. Previous research has observed that caring for a sick child will foster attachment between the child and the caregiver (Ainsworth et al, 1971).

With respect to the other three samples the responses elicited from nine PR, five SNR and eight SR children were very dissimilar from eight of the PNR group. (This suggests that five SNR children did not have good relationships with the caregiver.) The fathers, even though they were in the home left most of the child-rearing to the mother. However, regardless of who the primary caregiver was, he or she took very good care of the child. By their own admission, life for them was an uphill struggle because of their family's low SES. Yet they recalled the "safe haven" created for them by their mothers, and the feeling of being properly cared for, loved and protected. They recalled gaining a sense of security, trust and assurance from a very early age, and would endeavour to do anything without feeling too fearful. As noted by Robson et al (1995) children will endeavour to take risks in an environment which is supportive.

It is very difficult to choose between my mother and grandmother because both took great care of me. Besides, everyone at home loved to take care of me because I was the only baby there at the time. (PR/F#034)

I was very close to my aunt as well as my mother because they both had a lot of love for me and I felt very happy and safe when I was in their company. Up to now they still take good care of me. (PR/M#043)

I was close to my father because I spent more time with him than my mother. He made me feel like I was wanted. (SNR/F#079)

My mother and I had an excellent mother-son relationship when I was small, and we still do. I don't think anybody could have asked for more. We were almost inseparable. (SR/F#104)

From infancy I felt safe and secured and I still do today... Although we were poor I have never felt until recently that I have been deprived of anything, because my mother has always been there for me and she has always done everything for me. (SR/M#108)

Although student #077 felt ignored and slighted by her father, yet she felt safe in the comfort of her mother's love and affection. According to her:

> *My father did not want another child because he felt he was too old, so he ignored me from birth; but my mother was there for me. She made me feel safe, loved and comfortable. That's why I became attached to her. (SNR/F#077)*

Student #091 was also drawn to his mother because he too felt ignored by his father. He said:

> *I felt happy being with my mother... safe and secure. The fact that my father showed no love and affection towards me, he had me to be drawn closer to my mother.*
> *(SNR/M#091)*

The words "safe" and "secure" occurred quite frequently and spontaneously in our conversations to describe the quality of attachment experienced by the majority of subjects from the PR, SNR and SR groups in infancy and during their childhood. The word "close" was also used repeatedly to describe their early relationship with their primary caregiver or mother. But what led them to feel safe and secure and close to their mother or other primary caregiver? What underlying factors, processes or behaviour patterns brought about the development of such feelings? Positive child-rearing practices employed by the mother or other primary caregiver seemed to be a major factor.

> *My grandmother made sure that I had a happy childhood even though we were poor... I enjoyed being a baby girl growing up... There was always something at home to make me happy. (PR/F#034)*

> *My mother would read stories to me, and would sing and rock me to sleep... I can still remember her favourite lullaby. (PR/F#053)*

I felt close to my mother more than anyone else because of the things we did together when I was an infant. She would bathe me, sing to me, read to me, cut my hair, teach me to pray and so on. We had a very close relationship. I always wanted to be with her. (SR/M#105)

I was always close to my mother because she would always hold me, hug and kiss me, take me for walks in the park. She made my childhood a happy time for me in spite of the poor conditions under which we lived... I always ran to her if I sensed trouble or saw a stranger because I always felt that she was there to protect me from any danger. (SR/F#110)

I always wanted to be with my father because he spoilt me. He would prepare my meals and feed me, he would put me on his back or over his shoulders and take me for walks... I felt very happy with him. (SR/F#112)

In contrast, two children in the SNR group suffered at the hands of their parents during infancy. They described their childhood as the worse that a child could possibly experience, with neither love or affection nor guidance. It was determination on their part that they were able to make it as far as the secondary school. One child vividly remembered her first few years of life and emotionally recalled her parents leaving her and her five brothers and sisters in the care of her eldest sister who was only sixteen at the time. She admitted that she felt no affection towards her parents and that she never forgave them for the way in which they abandoned her. According to her:

Up to today I don't like neither my mother nor my father. I always wanted them to be there with me to raise me and to teach me about life. I never had anybody to teach me about that until I went to school. (SNR/F#081)

Another student recalled his childhood with a great deal of hate and bitterness. He too, from a very tender age vividly remembered his mother saying:

...its time for me to die... From the time I was growing up, my mother was always saying that she does not like boys, so we can go our own way and do our own thing, she just didn't care; and she would show it. (SNR/M#078)

It is noteworthy that in the analysis of early mother-child dyad relationships in this study, this was the only case where the student's gender appear to influence the relationship. The student believed that his mother's hatred for him was because his father deserted her when she was pregnant; so every time she saw him, he would remind her of him. Thus, the pent up anger and hostility which she felt for his father was being directed at him. Incidentally he was told who his father was at the age of ten years. When questioned about his father he bitterly replied:

> *Father? Miss I don't know the man... I have no father. I didn't grow up with father, so I am not in that father business. (SNR/M#078)*

There was no stability in his life. During the first year he was left in the care of many different people in many different homes. According to him:

> *When I was a baby for the first year or so, my mother would drop me at people's homes so they can look after me... Miss, so many people looked after me during that time I can't even count them. (SNR/M#078)*

Although it is argued that early attachment develops resilience, these SNR children achieve educational resilience at the primary education stage despite the absence of early attachment. This is an indication that there must have been other "protective factors" present in their lives.

However, while early attachment has been hypothesised in this study as important for developing inner resilience, that is, ability to cope with stress, the recollections of the students placed a great deal of emphasis on "parenting" which may be defined as a resource or protective factor. On this basis, there was probably a correlation between "attachment" and "parenting", and that the accounts given by students depicted differences between the four groups in terms of love and caring in the early years of life.

Summary

A child's development may be adversely affected if he/she is not allowed time and opportunity to form an early attachment with a primary caregiver. Eight out of ten

PNR children had poor parenting and did not form any early attachment. Therefore, it could be difficult for them to have long-range results of success with respect to educational success. Previous research suggests that insecure attachment and inappropriate child-rearing practices may place a child at risk of educational failure in the years beyond infancy. A decline in intellectual functioning was noted in examination results obtained from documentary evidence with respect to the PNR group. Conversely, the evidence also suggest that early attachment and positive child-rearing practices can in part, enhance a child's chances of later educational success. It can be assumed on the basis of the data and examination results obtained from documentary information, that this was the case with the PR, SNR, and the SR groups because they were all educationally resilient at the primary education stage.

Nine out of ten PR and eight out of ten SR groups had good early parenting and seemed to have formed early attachments with their primary caregiver. The SNR group was problematic with five out of ten having good parenting and the other five poor parenting. However, it can be assumed that the influences of early attachments and good quality parenting may act as buffers in the presence of stress or other risk factors. This may have helped resilient children to demonstrate an ability to cope with stressful life events and later educational activities, particularly at the primary education stage. The fact that the children felt secure and confident in infancy, would mean that these characteristics can persist in other developmental stages providing that they continue to receive love, affection and support from their parents.

How did the quality of family and home environment influence the children's academic performance?

As stated in Chapter V, Educational success did not take place in a vacuum. Always there existed some family background circumstances that provided opportunities essential for learning and encouragement for making academic progress. In most instances where children become educationally resilient particularly at the primary stage, the home and family provided emotional stability, cohesiveness and accord, and the necessary source of encouragement and support. In the later stages where parents

and other family members continue to provide encouragement and support, have high expectations of their children, and provide a family atmosphere with harmonious relationships and conducive for studying, these children have continued to achieve educational success.

The systems theory approach to the family conceptualised it as a social group in which the functioning of the entire family (the whole) is qualitatively different from the sum of its individual members (parts). Therefore, from an organisational perspective, the interdependency of strong, supportive and harmonious relationships among individuals in the family is critical in the formation of a unified family. One which is necessary for the creation of a family environment which is safe, supportive and suitable for learning. The children in the four groups were encouraged to talk about this aspect of their lives.

All the children selected for the study came from poor neighbourhoods. The questionnaire and other information were used to identify ten in each group who were most disadvantaged in terms of the material and social environment. Thus, this section reports children's view of their home and family circumstances and how they affected their lives.

How children perceive their home and family environment

All forty children interviewed were at risk of educational failure due to the adverse conditions under which they live. But children in the PR and SR groups were able to cope with their home situation and the stressful circumstances which confronted them, whereas those in the PNR and SNR groups were less able to cope. Evidence commonly used by these children to assess their home environment was the relationship among family members, and the amount of time parents devote to them. Thus, the home environment was judged good if that relationship was cordial and if there was family cohesiveness, and if parents spent a considerable amount of time seeing to children's needs. Support for this finding conducted in a different social context can be found in Garmezy (1985), Grossman et al (1992) and Werner and

Smith (1982). But according to a primary non-resilient child, *"... We are not really together as a family because we don't do anything together as one." (PNR/F#008).* Similar comments were made by the other seven PNR children interviewed. One child explained:

> *The people at my home, they never get along with each other... day and night they always quarrelling... They have their friends always coming in and out of the house drinking and smoking marijuana, and the place does have a lot of noise... I cannot do any work at my home. (PNR/F#009)*

In contrast the responses obtained from the majority of primary resilient children were to the contrary. For example:

> *... We cook together, we do house chores together, we play games and sometimes we even have quizzes. (PR/F#034)*

> *We get along well together as brothers and sisters, although sometimes we get into petty arguments, but nothing serious. (PR/M#043)*

> *At my home we share our home duties, we eat together, pray, we talk and discuss things together... (PR/F#053)*

Then there were the conditions under which these disadvantaged children live. There is no order in the homes of eight PNR children. There are no house rules, no study time, reading time or bedtime. There are no designated chores; everybody just seems to be doing what pleases them. A common feature in the home was the use of obscenities. The offspring of the psychotic parent admitted to living under very deplorable conditions and was constantly abused by her mother before she eventually gave her to foster parents at the age of four years. She claimed that she was often left by herself in an old house with nothing to eat. According to her:

> *We lived in an old broken down house her father (mother's) left for her. I never felt safe there because all the windows were broken down and the house was very old...I was there by myself most of the time, and would have nothing to eat. (PNR/F#010)*

However, her situation was not any better at the foster home because her mother frequently visited her there and would physically abuse her in the absence of her foster parents. She has scars all over her body which she showed to this researcher. She has contemplated suicide on many occasions without anyone's knowledge. Her mother gave birth to five children and she is the only survivor. The others died very young, two in infancy because of poor health. According to the child (#010) her mother was unable to take proper care of them. Although she gave her away to foster parents, she still wanted to retain control of her. She distinctly remembered the incident which seemed to have made a lasting impression on her mind. In explaining how her mother gave her away, she said:

> *We went to a beach party one Sunday and while we were there, my mother just took me and pushed me towards my foster mother and said to her "You want a child? Look, you can have her if you want" just like that; and she went away... My foster mother took me to her home after the beach party. (PNR/F#010)*

As noted above, accompanying these poor home situations were frequent incidents of child abuse both physical or sexual. In the case of child #003, she admitted being sexually abused by her father from the age of ten, but her mother, who is an alcoholic is unaware of the situation. She is fearful of her father who threatened to beat her if she tells her mother. Her first mention of it was to me. According to her she doesn't know how to deal with the problem and as a result she feels tense at home and at school, and is unable to concentrate on her studies. She said,

> *I don't like to stay at home because I don't feel comfortable... I find it very hard to do my homework, so sometimes I just don't do it. (PNR/M#003)*

Having a proper diet was a great concern for the majority of the subjects in all four samples. Many of them had to skip a meal a day, or go to school without having a proper breakfast and nothing to eat at school. Some of them recalled hiding from their friends at break and lunch time, while others stayed and were given something to eat by a friend or by the teacher. This PNR child, like #010 and many others also

experienced periods of hunger and described how, from age two years, he tried to cope with it. He said:

> *I remember going out to look for things to eat... I would go to the supermarkets and steal things to eat, and would stay out till night time. When I come home my mother would lock me out so I would sleep under people's houses until the next day. (PNR/M#002)*

In contrast, nine of the ten PR children who also lived under poor conditions demonstrated an ability to cope with the situation with assistance from their mothers and/or other family members. According to their descriptions, their homes, although poor, were better organised and structured, and the atmosphere which prevailed was conducive for learning. They explained:

> *We don't live in a big house, but my family live a very happy life... My mother and stepfather are the breadwinners. They don't make much, but they provide us with food, love, shelter and care... We have learnt to share our resources... (PR/F#053)*

> *My mother makes the house rules but we also help her to make them. Therefore we try not to break them, otherwise she will punish us. (PR/M#043)*

According to her (PR/F#053) everybody had their house chores to do. In addition, there was a time for everyone to be in at nights, a time to do their homework or study, and the entire household prayed together. Besides, there was always someone to assist with assignments.

In describing her home situation child #053 gave most of the credit to her stepfather. Her biological father deserted her mother when she became pregnant with her, so the mother was saddled with the responsibility of raising her and her brothers and sisters alone, until her third stepfather came along five years ago. According to her:

> *I am very happy to have a stepfather in the home because if he wasn't there, we would not be going to school. My mother only work two days a week at the Boxing Plant. She didn't bring enough money to take care of all of us. (PN/F#053)*

Nevertheless, she admitted being happy despite the fact that she cannot always have everything she wants. She has also accepted the fact that her family is poor; she

doesn't blame them for it. But said *"The day will come when I will be able to change all that." (PR/F#053).* This was also the view held by the majority of the children from the PR group: the desire to change the low SES of the family.

However, one must not assume that it was always very easy for PR children to cope with their home situation. In many cases these children had to adapt as a situation unfolded. For example, child #038 came from a large family, and with five younger children in the home it became very noisy sometimes. As a consequence, it was difficult for her to concentrate on her studies; but she did not abandon her efforts. Instead, she found a way to deal with it. She said:

> *I find it hard to study at home sometimes because the house is very noisy. So, I discovered a place on the Calvary where it is very quiet and I work there. But in the night I wait until it is not too noisy when most of them go to bed, and then I study or do my homework. (PR/F#038)*

The fact that child #038 wanted to maintain her position of being among the top five students in her class, was the source of her motivation.

With respect to the SNR, their home situation seemed to have worsened during the period of secondary education. With the exception of student #091 and two SNR children who formed no early attachment with their primary caregiver, and who, through subsequent developmental stages of childhood and adolescence, continued to experience tremendous hardship and coping difficulties, the remaining seven from the SNR group, by their admission had a good home environment conducive for learning during the primary school stage. This good learning environment was experienced by nine of the ten SR children.

Of the three non-resilient students whose home did not provide the kind of environment for intellectual nourishment, one of them described the absence of family cohesion and the presence of discordant parental relationship at her home in this way:

> *At home there were many problems and fighting. My Mum and Dad never had a relationship at all, and there were always the fights. I heard them all the time because the house is small. It was quite disturbing. (SNR/F#081)*

In explaining how she tried to cope with the home situation:

> *I would find a quiet place because at home it is so noisy, there were always the arguments, the quarrelling, the cursing... so I usually sit by myself in that quiet place and do nothing just read a bit, and usually think about things that's going on and try to understand them. (SNR/F#081)*

The second student (#078) said that in terms of the definition of a home and family offered by the researcher, he had none. From infancy he was being continually placed in different homes for caretaking, not that anyone really took care of him by his own admission. This pattern never changed. According to him he cannot give anyone his home address because he doesn't have one. He spends a few months at different people's homes including that of his mother. His place of residence on a census form would appear as "no fixed abode". According to him:

> *I have stayed at every relative that I have in the area... They think I am worthless, so I am acting out the part with the help of my mother of course. (SNR/M#078)*

The third student (#091), one of the most verbally fluent ones interviewed, also experienced serious family problems although he was securely attached to his mother. It was always tense at home for him and the rest of his family, because they could never tell who the father was going to physically abuse next: his mother, his brother or himself. Growing up at home was not a happy time for him. There were some painful memories some of which he will never forget; for example, getting his arm broken by his father, his mother sustaining a fractured ankle running away from him, and having to run out in the middle of the night to seek refuge with neighbours. According to him:

> *From the very early stages it was not a happy family all because of my father who was very abusive... We used to leave the house sometimes and sleep at neighbours... I did not like to live there. I dreaded going home from school; so sometimes I would delay going home to a loveless father. (SNR/M#091)*

Like the PR group, the SNR and SR groups assessed a home environment as good if there were house rules enforced by the mother, and when different people were

assigned tasks to do or fulfilled particular roles in order to maintain coherence within the family. This mechanism was used to ensure the cohesion and unification of the entire family however diverse their characteristics (Sroufe, 1979). For example,

> *Everybody had their work to do. Different people had different tasks... There were house rules which my mother made and enforced; if you break them, you pay the consequences. For example, we all had to be in at six o'clock, but my older brother was usually defiant; therefore he always paid the consequences. (SR/M#105)*

As opposed to what a SNR student said:

> *There were no rules in the house... I just did what I want at home. I helped with the house chores sometimes but I didn't really have to do it. (SNR/F#077)*

Like the PR group, those children from the SNR and SR groups also had a difficult time coping with the stress imposed by their poor home conditions; and having a proper diet was also of concern to them. It is widely accepted that adverse living conditions generate environmental stress. Therefore, forming harmonious relationships and family cohesion are significant protective elements. However, resilient students were able to cope with the help of their mother or other family members who really understood the needs of another human being. These students explained how they coped:

> *My mother treated all of us the same. When it came to meals it was the same. Sometimes she had to improvise and try to leave some of the food for the next day. So we would have to skip a meal because things were very hard. (SR/M#105)*

> *When there wasn't a lot to go around, my mother would make the sacrifice, give us the little she had and stay without. There wasn't always enough anyway, but we had learned to accept the situation. (SR/F#112)*

However, the home and family situation changed during the period of adolescence when the children were receiving secondary education. The number of SNR children living in a poor and disorganised home environment increased from three in the

primary stage to six in the secondary stage. In contrast to this rapid deteriorating situation in the SNR group, two SR children (#105; #111) experienced dramatic deterioration in their home environment. There were no drastic changes in the home environment of the remaining seven SR children. One of the secondary resilient student whose home situation changed explained:

> *My father didn't pay any attention to us as we grew older... I have often wondered what he did with all the money he worked for because our lifestyle did not improve at all. Instead, it deteriorated and my mother really had to scrounge to make ends meet and to get a decent meal for us.(SR/M#105)*

The loss a loved one who was a stabilising force in your life can be an experience little short of devastating. That was the stressful life event in the life of SR student #111, one which she found very difficult to cope with. She was in Form 3 when her father died in a tragic motor-vehicular accident, and things never seemed the same again. Her mother lost interest in her, and concentrated on a relationship which made the daughter very unhappy. According to her,

> *My life will never be the same again without my father because everything I did, I did it to please him. Now there is no one else to please. (SR/F#111)*

With the six secondary non-resilient whose home environment became dysfunctional, one of them blamed it on the fact that her mother changed homes too frequently. Child SNR/F#083 said that *"Between the time I was 14 years in Form 2 and 16 years in Form 4, we changed homes four times."* At age 14 years they lived with her stepfather at his mother's home. When trouble broke out between her mother and stepfather, they returned to her grandmother's home. While there her mother developed another relationship and they moved in with her new stepfather in another community. The relationship only lasted nine months. She said:

> *My mother was too ashamed to return to my grandmother's place, she went instead to live with one of my aunts in another area. (SNR/F#083)*

The data showed that soon afterwards she started another relationship and eventually moved in with the partner in yet another community just before the commencement of the academic year when the child had to be promoted to Form 5. The child said:

> *We still live there, but by then it was too late for me to settle to do any serious work. CXC Exams were just a few months away. (SNR/F#083)*

Another SNR student who was attached to her father believed that the relationship between herself and the rest of the family had changed for the worst. She gave two reasons for this change. Firstly, she thought that because she was the only family member who made it to the secondary school, the others hated her for it. This jealousy induced sibling rivalry resulting in feelings of hatred and envy demonstrated in various ways. For example, they left all the house chores for her to do; they often quarrelled with her; she was often blamed when things went wrong; and they made it impossible for her to study at home. Secondly, she fell in love when she entered Form 1 to a Form 4 student. Her parents objected to the relationship on the basis that she was too young. She was very defiant and would not give in to them. At that point her parents severed all ties with her. She no longer receives any support from them; not financial or emotional. Hence the reason the parents do not make any attempt to mend the growing rift between her and her brothers and sisters. This evidence supports Egeland and Farber's (1984) notion that the quality of a child's attachment may alter with changing family circumstances. In very emotional tones and sobbing, she said:

> *I don't get along with my family members and they don't get along with me...It has become very difficult for me to live with a family I don't feel comfortable with, and I don't know what to do about it. (SNR/F#079)*

A remarkably common feature was the time devoted to prayers by the families. In 70% of the interviews conducted with children from the PR and SR groups, although they belong to different religious denominations, attended church and spent a considerable amount of time praying. Many of them expressed the belief that to succeed, one must have faith and needs inspiration from a supreme being, God. A good home environment was therefore assessed by the degree to which the family

revere and worship God. A typical response was *"All of us go to church and we would all pray. We always prayed." (SR/M#105)*. In contrast, 20% of PNR and SNR children devoted time to prayers.

Summary

In summary, there were differences in the perspectives of PR and PNR children. Despite the fact that they live in the same low socio-economic catchment area, and are of low income and working-class families, their home and family environment and experiences were quite dissimilar. Whereas the majority of resilient children felt that their home provided an orderly and supportive atmosphere conducive for learning, the non-resilient children, on the other hand, described their home environment as disordered and a learning obstacle.

With respect to the SNR and SR groups, the majority of subjects experienced a good home environment in the primary education stage. However, the situation declined in the secondary education stage for most of the SNR children. The three SNR children who lived in poor home environments during their childhood, experienced further deterioration in their home situation, whereas the remaining three SNR were confronted with an increase in stressful environmental factors with which they found difficulty coping. This was clearly visible in the level of students' academic performance which changed with progressive deviant family background which proved stressful. This progressive academic decline was obtained from the documentary information obtained from their schools.

With regard to the SR group the evidence suggests that linkages between secure early attachment and later harmonious family relationships, reflected continuities in positive environmental influences and academic achievement. Therefore, it is not presumptuous to suggest on the basis of the evidence, that the quality of home and family environment does influence the academic performance of children, and their chances of achieving educational success.

To what extent does parental encouragement and support contribute to educational success?

Analytically, parental encouragement was concerned with motivational features such as the level of interest shown by parents in their children's education, by way of certain demonstrative methods (e.g. visits to school; giving study time; assisting with assignments...) and parental expectations. Support, on the other hand, was viewed in terms of emotional features such as being made to feel valued, accepted and special. Questions about parental encouragement and support generated a great deal of reactions from children of all four sub-samples. There was an intensity to the responses about parental interest in education particularly from the PR and SNR secondary children, which made it clear just how significant this behavioural pattern is in stimulating intellectual development and motivating children to learn.

Throughout that section of the interview, children attempted to indicate their parents' interest or disinterest in them and their educational progress, and how this could have influenced their standard of academic achievement in the primary and secondary school stages. The evidence children used to indicate that was how good a relationship they had with their parents. According to them if the relationship was discordant, then parental interest in education will not be forthcoming, but if the relationship is strong, the level of parental interest will be high.

Children's Relationship with Mother and Father

It is not at all surprising that judging from the home and family environment, only three PNR children considered that they had a good relationship with their mother, as opposed to nine PR, seven SNR and seven SR children. However, this good mother-child relationship was evident in the primary education stage for most of the SNR and the SR children, but in the secondary education stage four SNR and five SR children maintained that relationship.

The general consensus of opinion among the PNR were:

> *I don't love my mother very much because she do a lot of things to hurt me already. I don know if is because she is drinking a lot of rum. (PNR/M#002)*

> *My mother is very rough and is not an easy person to talk to... I think she could have done a better job bringing me up. (PNR/F#003)*

> *My mother was out most of the time so I hardly see her to talk to her or anything so. (PNR/F#006)*

> *I never like my mother because she is not a loving person. She is rough and always beating me... I can never forget the broken leg I had which made me stay home from school for a long time because my mother hit me on it with a piece of stick. (PNR/F#007)*

The SNR children who did not experience a good mother-child relationship were very emotional when they described the nature of their relationship with their mother.

> *I have no relationship with my mother. She is doing her own thing and I am doing my own thing. I don't talk to her because I have nothing to say to her... I don't discuss anything with her. (SNR/M#078)*

> *Up to today I don't like neither my mum nor my dad... I don't think I can ever forgive them for what they had me to go through in my life... Alcoholics! (SNR/F#081)*

> *We are not as close as before... I find it very difficult to talk to her now like before, probably because of her drinking problem. Both of my parents have become alcoholics. (SNR/F#085)*

There was evidence of intergenerational continuity in serious child-rearing difficulties in the case of this SR student who did not have a close relationship with his mother. Apparently his mother experienced adversities growing up, and this could have contributed to her predisposition to parenting difficulties. According to the student:

> *We don't really have a relationship. My mother is very harsh and selfish, and I think it has something to do with her upbringing. She was used and taken advantage of by her family, and believes that this is the way to bring up her own children. (SR/M#103)*

With this kind of mother-child relationship where love and affection seemed non-existent or exist superficially, it is not surprising that the mother paid very little attention to the educational development of the child. However, he is intellectually superior, and received support and encouragement from his teachers, his mentor, and other people in his small community; and with determination he was able to cope with the stressful home situation.

The children who enjoyed a very good relationship with their mother had frequent communication and discussions between mother and child, which was usually initiated by the mother. Parent and child seem also to engage themselves in activities together.

> *My relationship with my mother is like one of mother and son. Every afternoon when I come from school we will talk about all the good and bad things too that took place at school. We talk a lot. We are like friends. (PR/M#043)*

> *We always talk, share our daily lives together, discuss ourselves and things happening in the world.(PR/F#053)*

> *My mother and I are still close. She always talks about society, about people, her life, her parents and I always like to listen. (SR/M#106)*

> *I had a very close friendship with my mother because up to today she is the closest person to me... I could talk to my mother about anything. (SR/M#108)*

> *I have a very good relationship with my mother. I don't know why, but I feel that I can tell my mother anything. I trust her a lot. Yes, we do a lot of talking. She makes me laugh. (SR/F#112)*

With respect to father-child relationship 40% of the four samples have no father figure; but where the father figure is present, spouse abuse is a common feature. Nevertheless, the children felt that if a good father-child relationship exists, then it is highly likely that the father will take an interest in the child's educational progress and motivate him/her to learn. The opposite is also true as was indicated in the responses obtained from most students. There is a lack of communication, little or no child support, physical, verbal and sexual abuse. The general feeling of PNR

children are reflected in these responses:

> *I don't get along with my father now. I don't like him any more because he is doing something bad to me, but I never tell my mother anything... He is speaking to me, but not every time. (PNR/F#003)*

> *He is my father, yes, but I don't like him. He is always coming home drunk; and when he does, he quarrels with me or he is beating me. I don't have to do him anything. He is just bad. (PNR/F#007)*

> *My father drinks a lot and gets drunk... We don't spend much time together because he is always out. So we don't have time to do anything together. (PNR/F#026)*

Similar responses were obtained from the majority of children from the PR group. *"I don't talk to him much or discuss things with him",* said PR/F#038. Another child responded, *"He provides me with material things but not love and affection." (PR/M#041).* And another:

> *I don't like him but I try to co-operate with him. But he too quarrels and shouts at me. If I do something or misplace something, he makes a big fuss. We don't get along at all. But he gets along with the two last ones who are his children. (PR/F#037)*

However, child #053 had this to say about her stepfather:

> *I like my stepfather. He is more of a father to me than my natural father. I get along well with him... He takes good care of me and treats me kindly. (PR/F#053)*

The SNR and SR groups noted the importance of a good father-child relationship in achieving educational success, yet, in many cases they felt that was not forthcoming. The reasons given were the father's personality, his attitude, his abusive nature, and his hostility towards their mother. The consensus of opinion were reflected in these negative responses:

> *When I was small I used to call him daddy. Now, I don't call him anything... We just don't have a father-daughter relationship. (SR/F#107)*

> *Over the years there has been relatively no relationship between my father and me. He goes out of his way to make life difficult for us at home because of our close relationship with my mother. (SR/F#110)*

I live with stepfather no.4. He is better than the rest, but I don't hold conversations with him because he is not my father. Besides, I don't want to form any relationship with a man who is not my father. (SNR/M#084)

This student responded with great emotional intensity:

Extremely abusive; always quarrelling and beating up my mother. I did not like it and therefore I disliked him... We never got close, never spent time together to do anything or discuss anything... I don't think he likes any of his children. (SNR/M#091)

There appear to be no difference between the four groups. None had a good word to say about their father apart from PR/F#053.

Summary

Mostly PR children established close relationships with their mothers. The majority of SNR and SR students had a good relationship with their mother in the primary education stage; a relationship which continued for some particularly the SR group throughout the secondary education stage. The result of this friendship is articulated by the psychoanalytic theory as an increase in personal confidence, and a greater sense of self-worth and self esteem, all of which are characteristics which can increase children's chances of educational success. However, the evidence suggests that such cognitive features like learned-helplessness may be derived from poor relationship experience, and therefore increase the child's vulnerability to stress. Hence, the cognitive (and emotional) development of the child is conspicuously affected by the relationship in which he/she is involved (Hinde, 1988).

The presence of a strong parent-child relationship increased students' chances of educational resilience, possibly because it provided buffering effects which modified their responses to stress. This finding found support in Rutter (1979) who emphasised the positive effects of the child's relationship with at least one parent in a deviant family background. In contrast, the presence of disharmonious and discordant parent-child dyad relationships which existed among the PNR and SNR

groups can be extremely stressful, and can threatened the students' intellectual development particularly if it is sustained over a sufficient length of time. The findings suggest that the experience of one sort of parent-child relationship may have an enduring impact on the child's learning capacities.

From the evidence one can summarise that fathers of the children in this study have played a negligible role in bringing up their children, and taking an interest in their education. As discussed in Chapter 11, this is part of our cultural heritage, a legacy of colonialism where the father's role was to provide the meals and conjugate, while the mother was responsible for the home and child-rearing. In both pre and post-emancipation periods the dominant family structure was matriarchal, a family-type which still dominates modern day Caribbean societies. Therefore, it is not at all surprising that the children in the St. Lucian society are more attached to the mother than the father. This is reflected in the data which revealed that in 40% of the four samples there was no father figure. Thus, the evidence suggests that a good father-child relationship is less important than a good relationship with the mother, because from very early times, mothers have been known to play the key role in bringing up their children.

Parental interest in education

Judging from the evidence on children's reactions to their relationship with their parents, it was not surprising at the way in which they responded to the question on parental interest in education. In all the cases but one (from the PR group) where interest in education was shown, it was the mother and not the father who demonstrated it. Only two PNR children indicated that their mother showed interest in their work as compared to nine out of ten PR children. According to the remaining eight PNR and one PR children, their parents did not encourage them, did not go to the school unless they were sent for, did not ask about school, nor did they put any pressure on them to do their homework, to read or to study, or to ask for report books. The primary non-resilient children responded in this manner:

My mother never, never come to the school to see my teachers; so

they don't know how I am getting on at school. The only time she will come to the school is when the Headteacher send for her because I always fight in the school. (PNR/M#001)

My mother never show if she is interested in my school work. She never talk to me about my school... She don even know who is teaching me... I miss school for days and she don even know... as if she would care. (PNR/M#002)

From the time I was in Standard 3 (Grade 7) I used to sign my mother's name on my report book and take it back to the teacher at the beginning of the next term. My mother did not know because she never ask me for my report book. (PNR/F#008)

The child who lives with foster parents described how very easy it was to play tricks on them. She had one exercise book on which she copied work and corrected herself. Everything was marked "right" with such comments as "well done", "excellent" or "very good" written at the end of each exercise. This was the book that child PNR/F#010 always showed to her foster parents whenever they asked to see her school work. The trick was never detected. According to her, if they were really interested in her work they would have taken the time to check her book properly, and realise that it was the same book that was being shown to them all the time.

In contrast, these negative feelings were counter-balanced to a great extent by nine PR children who received a great deal of support and encouragement from their mother. The responses demonstrated mothers keen interest in their children's education:

My mother will never disturb me if I am studying. She will make sure that I get the time I need to do whatever it is that I have to do. (PR/F#035)

My mother will give me time off from my house chores to do my school work... She will make sure that the house is quiet for me to study, because sometimes it can be very noisy. (PR/F#040)

Miss my mother always come to the school to talk to the teachers about my work. She likes to attend P.T.A. meetings and my mother will use that opportunity to return my report book to the teacher. (PR/M#043)

Most times my mother will sit at the table with me when I am doing my homework. If there is something that I don't understand, she mother will try and explain it to me. (PR/F#053)

The children the SNR and SR groups were inclined to suggest that the support and encouragement they had received prior to taking the CEE, tended to dwindle once they were in the secondary school. However, two children from the SNR group reported parental interest in their educational progress. Those whose parents showed no interest in their education responded in this manner:

Every time I asked my mother to buy me a book, it could be an exercise book, she will shout at me "It's not any good you will do." I will beg her, but she will not give it to me, but she will give it to my sister... I remember asking her to help me go to the Morne Technical College, she started to quarrel and told me if she will steal for me... So I just gave up on school. (SNR/M#078)

She did not sit and work with me because she is illiterate; but that's no excuse. At least she should try to encourage me and talk to me, because when you are at secondary school it's very easy to let friends influence you. (SNR/M#080)

My mother just wanted to see the report book at the end of the term; but she was not encouraging me or anything like that... I know she doesn't know the work but she could have done more than she did. (SNR/F#083)

Similarly, seven SR students reported a lack of parental interest in their educational progress. The evidence revealed that at this educational stage, most parents were unable to assist students with their school work because of their limited educational background as indicated on the questionnaires. Therefore, they expected students to be self-motivated. Most of these parents received up to primary education, or never attended school. But the interview data revealed that even some of those who attended primary school were illiterate and therefore could not help with assignments. But although subjects tried to understand their parents' predicament, they felt that this should not be a deterrent to parental support and encouragement.

In many instances, the responses of SR children made reference to their parents' educational limitations.

When I was at the primary school yes, but not at the secondary school. Besides they are illiterate, so it didn't make sense to show them my school books or report book or to expect any help from them. (SR/M#103)

My parents are illiterate so they can't help me with my work or check my report book. I don't think they even know anything about the secondary school system... (SR/M#106)

The father of child #105 did not see the need for him to have an education and therefore did nothing to motivate him. According to the student:

> *I didn't get that go-ahead from my parents, my father in particular. If I had to study at nights, he would tell me to turn off the light... He would tell me to use the daylight to study because money does not grow on trees, and he has to pay the electricity bill. (SR/M#105)*

On the other hand, this eighteen year-old had this to say about his parents:

> *My mother is very keen. She is very much interested in what I am doing. My stepfather, he listens on, he doesn't show his interest that much, but I know he is very much interested in what I'm doing. (SR/M#108)*

Another also responded positively. She said,

> *I get rewards from my mother whenever I bring home my report book. Imagine at my age I get hugs and kisses and this would make me feel extremely happy. My mother has really made it happen for me. (SR/F#110)*

Summary

Parents showing such keen interest in their children's education, will also have high expectations of them, and will ensure that they create the right atmosphere at home to stimulate learning. Thus, one can summarise from the evidence, that parental interest in children's educational progress at the primary stage will increase their

groups. What was remarkably noticeable was the fact that in every case in the PR group where a mentor existed and two SR children, the person acting as one was the child's own mother. She was the one person who supported and took a keen interest in them and their educational progress, inspired them to work hard and encouraged them in many ways. In the words of one child, *"She was always there to inspire, motivate and encourage me." (SR/F#110)*. In the words of another,

> *... The work that my mother has put into me, I can never repay her for, never,because she has made me a lot who I am, what I am right now, and that's more than anybody can give me. (SR/M#108)*

A PR child remarked,

> *I spend most of my time with my mother because she is working hard with me to help me to achieve my goal... She wants me to become a doctor. (PR/M#041)*

Another PR said with a great deal of confidence,

> *My mother has helped to influence my life in a good way... She is the only person who helps me in my school work out of school, and she always persuading me to compete with the children in my class. I think she believes that this is one way of staying on top. (PR/F#035)*

With respect the SR group, in addition to the two children who reported having their mothers as their mentor, three received mentoring from their teachers at the secondary schools. The data showed that these children felt indebted to the teachers who saw the potential in them to learn and their eagerness to succeed. They believed that their constant support and mentoring increased their chances of becoming educationally resilient. They said:

> *...Any advice I needed on my school work I go to my teachers especially my English and Maths teachers. I had them for three years in the last three Forms (3,4,5). They were always there to help me, not only in the subjects they teach but in the other subjects as well... (SR/M#103)*

> *I'm happy I had my Integrated Science teacher in Form 3 to take an interest in me because he realised that I was going through a rough time with some of the students. Initially he just wanted to protect me*

from them, and then this relationship developed into something more... I think he wanted me to do better than them and really gave me the push... (SR/M#106).

Mr. S..... really helped me through primary school, but at the secondary school my French teacher was my mentor. I don't know if it was coincidence, but she was the wife of Mr. S... She was everything: a friend, a teacher, a disciplinarian and a counsellor... (SR/M#105)

These children trusted and confided in their mentor, mainly because of the mentor's confidence in their ability to do well and the close relationship that they have established.

The consensus of opinion among PNR children was that nobody had confidence in their ability to do well. According to their responses, the inspiration, motivation, and encouragement should come from home; and if their parents did not give it, why should anyone else? One child expressed himself as follows:

> *Miss, but my mother don care about me... she don care whether I go to school or not, so why should the teachers or anybody else care about me? (PNR/M#002)*

This was how another child put it:

> *Miss, the thing is, if your parents show that they are interested in you and your school work, other people like the teachers will be interested in you too. But if your parents do not care about what happens to you, other people will act the same way towards you. (PNR/F#010)*

This is an indication that the resilient children seem to be more able to turn to others for support, and are less dependent on the immediate family. This is probably due to them having an internal locus of control, a factor which is discussed later in this chapter.

chances of becoming educationally resilient. Nine out of ten PR children who achieved educational success attributed it to the high level of support and encouragement received from their mothers. In contrast, although two PNR children admitted having received maternal encouragement, yet taken as a whole, their level of academic competence may have been impaired by its absence.

The evidence revealed that whereas SR children persevered and achieved educational success despite the lack of parental interest, SNR children did not seem to have the will for self-motivation and therefore could not achieve the same. Unlike the PR group where the linkage of good maternal relationship and maternal interest in education seemed significant, this linkage was not so significant with the SR group. Only three SR children with a good mother-child relationship reported maternal interest in their education. To summarise, maternal interest and a harmonious mother-child relationship seem to have a greater influence on students performance in the primary education stage, but are least effective during the period of secondary education.

Did having a Mentor increase children's chances of educational resilience?

As discussed in Chapter V, a mentor does not only take a keen interest in the child's intellectual development, but is also a source of inspiration and a role model. A mentor motivates the child to learn, and encourages him/her to have high aspirations and work hard in an endeavour to achieve them. He/She is also someone that the child trusts and seeks advice from; someone that the child can rely on in difficult times for help and guidance; and be an example to which a child might aspire.

One possible outcome for the presence of a mentor in the lives of children from poor neighbourhoods, particularly in the absence of a good parent-child relationship, was that children would be motivated to achieve educational success. In other words, the mentor would sometimes act as a substitute for supportive and interested parents. In the PR group and to a lesser extent the SR group, the presence of mentors was a dominant feature. Mentors were less in evidence among the PNR and the SNR

The mentor as a role model: Its effects

It was expected that in addition to being a source of inspiration, the mentor would also be a role model; someone that the children admired and wished to emulate, but that was not entirely the case. With the exception of eight PR and three SR children, all the other children either admired certain qualities in certain individuals, admired persons who are remotely distant from them, or neither.

Not having a mentor in their lives did not seem to matter that much to the PNR children. *"I don trust or tell my secrets to anyone. I keep everything to myself," said child PNR/M#002*. This response was typical of those elicited from the PNR children and two PR children. There was no one that they admired, wanted to emulate or use as a role model. The response of child #009 was also typical of the rest of the PNR group and two from the PR group. She said, *"Miss, I don't really admire anybody and I don't think that I want to be like anyone" (PNR/F#009)*. The only exception from the PNR group was child #010 who admitted to admiring Patrick Ewing the professional basketball player from the United States, and Pelè, the Brazilian ex-professional football player. *"He is a good football player. I like his skills and the way he dribbles,"* said PNR/F#010. From the eight PR children, seven admired their mothers and wished to emulate some of their good qualities, but one child admires Jesus Christ. She said, *"I admire Jesus and want to be like Him, because He was kind and gentle and He never disobeyed rules." (PR/F#053)*.

Unlike the PNR group, not one SNR child admitted to trusting or confiding in anyone, but five from the group admired certain characteristics and skills in certain individuals.

> *I admire certain things in certain people like their skills and talents, but I don't really want to be exactly like them. (SNR/M#084)*

> *I don't have a role model, but I admire the good things that certain people have achieved... but I have to achieve mine for other people to notice me. (SNR/M#080)*

Child #077 specifically identified the things she admired in people. According to her, *"I admire their attitude, self-confidence, self-control, and their ability to learn." (SNR/F#077).* From the remaining five SNR children, three admired certain individuals and expressed their desire to emulate them. One child said, *"I want to be like Whitney Houston because she is a great singer, and I like to sing." (SNR/F#079).* Another expressed himself as follows:

> *Not one particular person; but I admire those persons who have done well in athletics. I admire their skills; and these I would like to emulate. (SNR/M#091).*

But one of the remaining two SNR children vociferously responded:

> *Admire! Role model! Miss, that's not my line. You see me, I have no admiration for nobody, and I don't want to be like anybody. Just leave me as I am.(SNR/M#078)*

Like the SNR group, seven SR children admired skills, talents, attitudes, behavioural patterns and personalities in certain individuals, but did not particularly like to use them as role models. The remaining three SR children have great admiration for their mothers because of their dedication and the hardships they endured in bringing up their children.

> *I just want to be the best that I can be and not to be like anyone person... Yes, I admire people who have been successful like public speakers who have been rhetoric, and good sports men; but I don't put anyone on a pedestal although I admire my mother for her dedication, and the fact that she was able to stay in a loveless marriage for our sake. (SR/M#105)*

> *I admire my mother because of dedication and when she sets out to do something, she will do it no matter what. That's what I want to do; that is the type of person that I want to be. And she never turns her back on her responsibilities... (SR/M#108)*

> *Well, I will have to say that I admire my mother. I find that my mother had to endure a lot of hardships in her life in order to bring us up. Her life has not been an easy one with five kids growing up and a husband who drinks like a fish... (SR/F#110)*

Incidentally, students #108 and #110 were two of the three SR children whose mothers maintained interest in their educational progress, and were also their mentors. The documentary evidence revealed that these three resilient children (#105, #108 and #110)) were the most outstanding with respect to the CXC examination results, obtaining 8, 9 and 8 O'level subjects respectively, with student #108 attaining 9 Grade 1's.

Summary

The majority of children from the PR, SNR and SR groups had a mentor in their lives during the primary school stage. In most of the cases too, the person who acted as mentor was their mother, and to a lesser extent (the SR children at the secondary schools) teachers. But upon succeeding the CEE and gaining admission to secondary schools, the role of mothers as mentors, like that of parental interest dwindled in 50% of the samples. The majority of parents have short term expectation of their children: that is, they want their children to attend a secondary school, to "rub shoulders" with students from advantaged backgrounds. However, upon admission to secondary education, the trend is for parents to cease to inspire, motivate, advise and be keenly interested in their children's education. Whereas mentoring was greatly missed by the secondary non-resilient children as was indicated by their responses of being under stress and their poor CXC examination results, the absence of a mentor in the lives of five SR children did not have such a devastating effect. They too admitted being under stress, yet they were better able to cope with the situation because of their determination to do well, and the desire to be in a position to improve the poor living conditions of their families. The findings suggest that having a mentor as a source of support (Garmezy, 1985; Werner & Smith, 1982) was more strongly associated with educational resilience in the late childhood/early adolescence stages than in the later stages.

Did internal locus of control increase children's chances of educational success?

In addition to the data obtained from the Nowicki-Strickland Locus of Control (LOC) scale which children completed, their perceptions of who was responsible for their academic performance were also elicited in the interviews. In the main, across all the SR group, the children thought that they themselves were responsible for their success or failure at school. This finding was supported by the results of LOC scales analysed in Chapter VII.

The interviews revealed that resilient children had faith in themselves and were very determined to succeed (also: Murphy & Moriarity, 1986; Werner, 1989). They were placed under a great deal of pressure by children from better families who never ceased to remind them of who they were and where they came from. But, according to one student, we used *"this negativism to motivate and inspire us to excel" (SR/M#105).* However, one student attributed his educational success to,

> *... my hard work; that is why I never believe that I am gifted; because I work very hard for what I get; that is why when people tell me I am brighter I shun them because I do not believe that. I always tell them if they work as hard as I do, they can accomplish the same thing. (SR/M#108)*

Another student said:

> *I study a lot. I spend the whole day, every day studying. I got my syllabuses and studied from them and I made sure that I knew everything that was being taught, and ... what I had not been taught. I made sure of that. (SR/M#106)*

The same personal commitment was expressed in more emotional tones by another student who wants to study Law and Political Science, and who wants to improve conditions at home before his mother dies. He said,

> *If I did not do well on the exams, everything, all my dreams would go down the drain. So I had to do well. It was extremely important. That's what I wanted, and I got it! (SR/M#105)*

The children were determined to do well because they had a goal to achieve in life. One resilient student had dreams of being a manufacturer, and in order to achieve this goal he had to do well at school. In his own words:

> *I want to run my own manufacturing company, so I am working very hard at school in order for me to achieve that; particularly in the business subjects. That's why I had to pass the CEE. (PR/M#041)*

Another resilient student explained:

> *I want to be a doctor. So far all my family members have jobs but no one has been a doctor; so I want to be the first one to be a doctor. So I had to pass my CEE, and continue to work hard at my school work in order to pass my CXC examinations with grades 1's, and then go to university to study for medicine. (PR/M#043)*

In contrast, the non-resilient students by their own admission did not take their school work seriously enough, and most of them attributed their educational failure to a lack of interest.

> *I could not have done well because I never did any extra work at home. Besides, there was no one at home to pressure me to study anyway. (PNR/F#026)*
>
> *It's true I did not study. I just go and sit the CEE... I have to blame myself because I don take my work serious... and I blame my mother too because she was not sending me to school a lot. (PNR/M#002)*

Children's inability to cope with new distractions in their lives was also accountable for their poor academic performance. In the words of one student:

> *I got involved with girls and my work suffered. If I had remain shy as I used to be, I would have done well in all my CXC subjects. You see, once the ladies are around, I play mannish and wouldn't finish my school work... I developed an interest in girls too soon, and I am still interested in them. (SNR/M#080)*

But this student expressed a more fatalistic view when he said,

> *I did not see the use of studying from all these books if when I finish I have to continue to live in the same area... So education did not seem important to me at that time. (SNR/M#084)*

Another student who was very emotional explained:

> *I just lost the will to fight to continue to work hard at my studies. I have been fighting all my life, and for what? Nobody cares! Nobody is interested in what I do; not my parents, not my sister, nobody... So I just gave up! It's a pity that it happened when I was in Form 4; but I just couldn't fight on any more.(SNR/F#081)*

Summary

The interview data, like the data obtained from the Nowicki-Strickland Locus of Control Scale, revealed that the students who were internally directed tended to achieve educational success, whereas those who were other-directed were more inclined to educational failure. This finding was reflected in the resilient children's uncompromising attitude towards the need to work very hard in order to achieve their personal goal of educational success. As externals, the non-resilient children expressed the need to be encouraged and pressured by their parents and other family members to get on with the work they knew they needed to do if they were to make educational progress.

Did teacher effectiveness increase children's chances of educational success?

Teacher effectiveness was evaluated by children according to the positive manner in which teachers carried out their duties in the classroom, the type of safe and supportive learning environment created in the classroom, and the high level of conscientiousness demonstrated by them. Such internalised and expressive commitment on the part of the teacher, can lead to high teaching standards from which all students can benefit irrespective of their socio-economic status, and the socio-catchment area of the school. Most of the schools involved in this study are located in poor rural areas or in close proximity to urban ghetto sites; but three of the

schools are located in fairly affluent urban areas. It is the belief among parents and educators that the former schools are at a disadvantage with regard to the quality of teaching staff and teaching apparatus in comparison to the latter schools. But the documentary evidence revealed that in both the CEE and CXC some students from the former schools perform just as well and even better than those from the latter schools. But on average the schools in the urban areas perform better than the schools located in the rural areas. The reason may be partly due to the high level of teacher effectiveness.

How children perceive the effectiveness of their teachers

In the main, the resilient children thought that their teachers needed to be complimented for a job well done. Besides transmitting knowledge effectively, most teachers also helped to maintain or enhance their students' self esteem by making them feel good about themselves and their performance.

> *...but they (teachers) were helpful in the way they explained the work to us... they always tried to make sure that we understood what they were teaching, and gave us stars and small gifts like pencils and exercise books if we do the work well. (PR/M#043)*
>
> *Although the teachers played favourites with some children, I did not dislike any teacher. From Stage 1 they saw I had potential and they help me to improve... They made me feel good and safe... (PR/F#034)*

These students also commented on the level of preparedness by the teachers when they came to class. According to one student,

> *They looked prepared because they always seem to know what they were about... Any time I do something well, the teachers will praise me or make the children clap for me. I would be happy... (PR/F#037)*

The system of giving rewards and incentives in schools not only stimulates learning, but also enhances students' self-esteem. This human need or characteristic Snygg and Combs (1959, cited in Robson et al, 1995: 169) believe motivates all behaviour irrespective of time and place.

But whereas the parents, mothers in particular, of resilient students were the primary source of support and encouragement during the years at primary school, the secondary resilient students reported that during the period of secondary education, their teachers were the ones who made a positive contribution to their educational success.

> *I was fortunate to have had very strict and good teachers; and, like everything else, they always wanted us to be perfect in whatever we did. (SR/M#103)*

> *I chose most of my CXC subjects because of my teachers although I was not particularly close to any one teacher. They were really quite nice and very good teachers except my Geography teacher... Everyone used to encourage us to do well in their subjects. (SR/F#107)*

> *At secondary school the teachers really showed interest in their students; they were very good and really helped. They were mainly Guyanese; they would sit down and listen to us; they really used to take their time to explain the work... Some of them even used their free time to help us with our work especially the Maths and Physics teachers. (SR/M#106)*

But a secondary non-resilient student who attended a different secondary school thought otherwise. He too was taught by mostly Guyanese teachers, and in his estimation, they were poor teachers who

> *would let us to do what we wanted and then sent us to the Principal's office. I suppose it was because they were not nationals. (SNR/M#078)*

The majority of students who were not successful at the CEE, and those who did not perform creditably in the CXC examinations, also felt that despite the fact that the teachers played favourites with some advantaged children, they did a good job. For example, one student said,

> *The teachers would help us with our work, but they would spend more time with some others like they have preference for some children more. (PNR/M#004)*

Other students felt that when teachers blatantly play favourites with some children, it can affect the other children in the class in a negative way. According to one student,

> *Personally, I think that every teacher had their favourites. Some of them showed it openly in the class. The Forms 4 and 5 do not have that; you will have to make the teachers like you. But there was favouritism in the lower Forms; and that could affect some children in a negative sort of way. (SNR/F#085)*

But one student had this to say:

> *I can't say that... People who believe that a teacher is playing favourite are wrong. I think it is because children who do not understand the work will constantly go to the teacher for help; so they mistake that for preference. (SNR/M#080)*

But the majority of resilient students, especially SR students indicated that although favouritism was a common practice among teachers, yet it did not affect teacher effectiveness, and it certainly did not affect them because of their determination to do well against the odds. Actually, favouritism was used by some as a source of motivation for learning. This finding is in keeping with Garmezy et al's (1984) "challenge" theoretical model which hypothesises that stressors could enhance competence. *"With me, I always convert anything negative in my favour,"* said student SR/M#105. *All the more reason why I had to work hard... I was determined to teach these rich snobs a lesson...,"* said SR/F#110.

The PNR students complained of being frequently punished with the strap, although most of them attributed that to their acting out classroom behaviour. One student said,

> *... It was when I went to the Senior Primary School that I began to give trouble and the teachers would beat me a lot and would shout after me... But they taught us well... In Standard 4, I had five teachers; they were very strict but they were good teachers. (PNR/F#007)*

Another student explained,

> *All my teachers were good; they taught me well but I just didn't take my work serious. I behave well in some classes, but I gave a lot of trouble in some... I would just do things to get licks. I would always fight in class..., play when the teacher is teaching or do some mischief in the class. (PNR/M#001)*

But one student did not like her teachers simply because she did not like their mannerisms. So as a result *"I would play and misbehave a lot. I would even fight in the class". (PNR/F#010).*

Summary

To summarise, in the main, students felt that teachers were effective if they were "good" teachers (a concept which will be qualified by students' responses in the discussion below), endeavouring to make a positive contribution towards their goal of achieving educational success. They further believed that to be effective, teachers must be child-centred, and be able to create a classroom environment which is safe and conducive for learning. In providing this kind of environment, teachers are not only seeking to enhance students' self-esteem, giving support and helping students to develop their potential, but also providing an environment which assists in alleviating stress and also facilitate coping (Robson et al, 1995). According to them to achieve this would involve *"the teacher in the classroom and the ethos of the school"* (1995: 170).

Children's perceptions of "good" and "poor" teachers

There are many factors and variables at both the institutional and personal level which can influence how students perceive their teachers. Among these are the teacher's attitude towards his or her students, the methods of teaching applied, the level of classroom management and discipline, the teacher's age and years of teaching experience, as well as the degree of learning which takes place, students' level of academic performance and the quality of teacher -student relationship.

However, the word "good" was commonly used by most resilient and non-resilient students to describe the teachers who taught them prior to July 1993. But the researcher felt that the word "good" was too vague and used prompts to get students to qualify it. As these SR students explained,

> *A good teacher is one who ensures that the students understand what is being taught, somebody who takes time to prepare for a class and actually shows that she knows what she is teaching, and somebody who is willing to give time to students who do not quite do well and help them out, and make sure that these students do well. She will help you to adjust and correct you if you do something wrong... Throughout the 5 years at secondary school, I had mostly good teachers. (SR/M#108)*
>
> *...they gave you extra assignments, prepared sample answers, they spent their free time with you explaining the work. You just had to listen to them and do as they say, if you wanted to pass. (SR/F#112)*
>
> *... One who knows the work, ...the strategies used to link up the different subject areas so that they don't teach in isolation. (SR/M#103)*

The PR students responded in this manner:

> *... they don't beat very much and will help us with our work; well, they never give work we did not do before. They were very kind... if I had a problem I will go to them, because you can talk to them and they will listen to you and give you advice. (PR/M#041)*
>
> *They were very good teachers. They could teach well. They wouldn't beat me because I did not understand the work but they would take time and really make sure that I understand what they were teaching. (PR/F#034)*

But the general sentiments shared among the SR students were that to be good teachers, their whole life should revolve around their students and their well-being (eg. SR/F#110); their concern and interest in their job should be made visible to all their students (eg. SR/M#106; SR/M#109; SR/F#110); they should look at teaching like a chance to make an impact on somebody's life forever, because you never forget the good teachers, nor the bad ones (eg.SR/M#105; SR/M#108); and that they should always maintain a good teacher-student (SR/F#110) and parent-teacher relationship

if learning is to take place (e.g. SR/M#105; SR/F#110). In addition, students should be able to communicate with them and feel relaxed in class (eg. SR/M#103; SR/F#107). The primary resilient children were concerned about them being pleasant, jovial and kind, conscientious, and understanding the students they teach.

Similarly, non-resilient students who also admitted to having mostly good teachers before July of 1993, described them as being strict, sometimes encouraging, avoiding the use of corporal punishment, and not being offensive to students. One student expressed himself as follows.

> *... they were very strict. When they gave us homework, they expected us to do it and accepted no apologies. They always expected us to be at school on time like they used to be, and always wanted us to look clean and to make good use of our time... They showed that they really cared. (SNR/F#091)*

These were the words of two PNR students:

> *My teachers never wasted time in class. They would teach and explain the work for us. If we don't understand, they will take us one by one and work with us. (PNR/F#009)*
>
> *They would teach us well; they would not call us names or insult us or beat us like some teachers... and they would correct our books when we do our work. (PNR/F#008)*

There is a tendency for teachers to "label", "call names" and use offensive language to students who come from very poor neighbourhoods, in particular those who continue to perform below average. These teacher-reactions can deliberately or inadvertently degrade students, lower their self-esteem, increase their level of stress and therefore affect their ability to cope with classroom activities. Although the non-resilient students claimed to have encountered a few, their impact on them and their academic performance could have been more damaging than they are willing to admit.

The researcher also posed the question of describing a "poor" teacher to both resilient and non-resilient students. The rationale was to ascertain the fact that they could tell the difference between a "good" and a "poor" teacher, by recalling their primary and

secondary school experiences. The data indicated that they were able to. Teachers were judged as poor if students felt that by their reactions, they did not like neither teaching nor the children entrusted in their care. Thus, these responses conveyed students 'perceptions of poor teachers:

"They don't know what they about..." (PNR/M#004);

"They never prepare to come to class..." (PR/F#034);

"They will give you work to do and don't explain it before they give it." (PNR/F#010);

> *Lazy! They will tell you, "Take page so and so, and do exercise so and so" and then sit at their desk. (SNR/F#081)*
>
> *They treat some children differently... They choose punishment to give children..., and give the harsh punishment to the poor children...(SNR/M#078)*
>
> *They like to beat a lot and insult the children and call them jackasses, and the children does feel bad. (PNR/M#009)*
>
> *They are not in the profession because they want to teach people, but because it's a means to make money... (SR/F#110)*
>
> *They are very authoritative, inflexible, stubborn and bossy, and use inappropriate methods of punishment... They also label students for example calling them lazy or dunce... Yes, I came across a few of these. (SNR/M#091)*

Summary

To be "good" is to be effective; that is according to students' perceptions of teacher effectiveness and a good teacher. A good and effective teacher will produce results such as helping students to achieve their goal of educational success. But good and effective teachers cannot operate in isolation. Therefore students did not have to depend entirely on the effectiveness of the teacher to achieve educational success. Hence, although the majority of students encountered good teachers prior to July of 1993, only students from The PR and SR groups achieved educational success; with both groups attributing their success in part to their teachers. In contrast, only one student from Sample 1 blamed her teachers for her failure.

The students were able to describe a "poor" teacher because although they admitted having mostly good teachers, they did come into contact with some poor teachers; but they were in the minority. As a consequence of the limited encounters with poor teachers particularly in the period of secondary education, students felt that they had a chance to achieve educational success. But depending entirely on the effectiveness of their teachers was inadequate. They also needed the presence of other resource or protective factors if they were to achieve educational success. However, the fact that resilient children encountered good teachers does not necessarily make them their mentors, although three SR children regarded them as such.

Summary of Interview Findings

The interview findings are summarised in the form of tables each of which depicts the profile of the students interviewed in the four sub-samples.

Table 20: Profile of the Ten Primary Non-Resilient Interviewed: Variables Assessed

PNR	GENDER	ATTACHMENT	MENTOR	PARENTAL INTEREST	GOOD HOME	EFFECTIVE TEACHERS
001	M	N	N	N	N	Y
002	M	N	N	N	N	N
004	M	Y	Y	Y	Y	Y
005	F	Y	N	Y	Y	Y
006	F	N	Y	N	N	N
007	F	N	N	N	N	Y
008	F	N	N	N	N	Y
009	F	N	N	N	N	Y
010	F	N	N	N	N	N
026	F	N	N	N	N	Y

Key: Y = yes N = no

Table 21: Profile of the Ten Primary Resilient Interviewed: Variables Assessed

PR	GENDER	ATTACHMENT	MENTOR	PARENTAL INTEREST	GOOD HOME ENVIRONMENT	EFFECTIVE TEACHERS
034	F	Y	Y	Y	Y	Y
035	F	Y	Y	Y	Y	Y
037	F	N	Y	N	N	Y
038	F	Y	N	Y	Y	Y
039	F	Y	Y	Y	Y	Y
040	F	Y	Y	Y	Y	Y
041	M	Y	Y	Y	N	Y
042	F	Y	Y	Y	Y	Y
043	M	Y	Y	Y	Y	Y
053	F	Y	Y	Y	Y	Y

Key: Y = yes N = no

Table 22: Profile of the Ten Secondary Non-Resilient Children Interviewed: Variables Assessed

SNR	GENDER	ATTACHMENT	MENTOR	PARENTAL INTEREST	GOOD HOME ENVIRONMENT	EFFECTIVE TEACHERS
077	F	Y	Y	Y	Y	Y
078	M	N	N	N	N	N
079	F	Y	N	N	N	Y
080	M	N	N	N	N	Y
081	F	N	N	N	N	Y
083	F	N	N	N	N	Y
084	M	Y	N	N	Y	Y
085	F	Y	N	N	N	Y
091	M	Y	Y	Y	Y	Y
097	F	N	N	N	Y	Y

Key: Y = yes N = no

Table 23: Profile of the Ten Secondary Resilient Children Interviewed: Variables Assessed

SR	GENDER	ATTACHMENT	MENTOR	PARENTAL INTEREST	GOOD HOME ENVIRONMENT	EFFECTIVE TEACHERS
103	M	N	Y	N	N	Y
104	F	Y	N	N	Y	Y
105	M	Y	Y	N	N	Y
106	M	Y	Y	N	Y	Y
107	F	Y	N	N	Y	Y
108	M	Y	Y	Y	Y	Y
109	M	N	N	N	Y	Y
110	F	Y	Y	Y	Y	Y
111	F	Y	N	N	N	Y
112	F	Y	N	Y	Y	Y

Key: Y = yes N = no

Conclusions

The evidence presented here suggest that forming an early attachment and good quality parenting, having a good family and home environment, having parents who take an interest in education, having a mentor, having good and effective teachers, and an internal locus of control are all factors with protective functions which therefore increase children's chances of educational resilience. However, some of these factors, notably maternal interest in education and having a mentor, have a greater influence on students' performance in the primary education stage than the secondary education stage. On the other hand, teacher effectiveness, and internal locus of control are significantly associated with educational success among SR students. But the remaining factors seemed influential at both educational stages for all resilient students.

In comparison to the other samples, the subjects of the PNR group did not achieve educational success at the primary school stage. Taken as a whole, they did not form any secure early attachment relationships, neither did they have a mentor. They

attributed their failure to themselves but felt that they could have done better with parental support and encouragement. These externally oriented non-resilient students encountered mostly good teachers, but the absence of the other protective factors in their lives increased their vulnerability to educational failure.

The PR children had formed early secure attachment with their primary caregiver, established a strong relationship with their mothers in childhood, and continued to be encouraged, supported and motivated by them in the adolescence stage. These internally oriented students attributed their success to maternal interest in their education, hard work, determination, and the good teachers they encountered. They also claimed to have faith in themselves and God; a belief they felt could have contributed to their educational success. They emphasised the role of the mother as always being there to encourage, inspire, support and motivate. Even though many mothers could offer no assistance to their children with regard to their assignments, they created a home environment conducive for learning, and ensured that their children were given enough time to study and complete assignments.

The students from the SNR group were resilient in so far as their success in the CEE, and the fact that they completed secondary education even though they failed their CXC examinations, most of which were written at the "Basic" level. Primarily, they blamed themselves for their failure, for a lack of determination on their part, but also believed that if their mothers had maintained the level of support and encouragement demonstrated in the primary education stage, they would have done better. But the evidence showed that maternal support declined after students passed the CEE and were admitted to secondary schools. It also revealed that even though students encountered mostly good teachers, the fact that they are externally orientated and living in disharmonious environments, limited the "good teachers'" positive effects on academic performance. Besides, there were no mentors in their lives to counter the negative effects of being other-directed. The evidence suggests that children (PNR and SNR groups) who have an external locus of control do not demonstrate the ability to cope with adverse situations. Support for this finding is seen in Seligman's (1975) learned helplessness paradigm.

The SR group, the most resilient group, did well enough in the CXC examinations which they wrote at the "General" level to gain entry to St. Lucia's only post-secondary institution - The Community College. The findings indicate that they are internally oriented and as such, demonstrated the capacity to cope with challenging situations. Support for these findings are evident in cross-cultural studies conducted by Werner and Smith (1982). Thus, these resilient students attributed their educational success to themselves and the inner desire and determination, not just to succeed, but to excel. They believed too that faith in themselves and God greatly contributed to their success. Also, they felt that the fact that they encountered mostly good and effective teachers enhanced their chances of educational success. At this stage of their educational life, maternal interest dwindled, but did not seem to matter that much to them. The three most outstanding students admitted having a mentor, their mother, who was a constant source of inspiration. But taken as a whole, not having a mentor did not have such an adverse effect on that group.

There was also evidence to show that the success of the SR students was partly due to their response to their poor home circumstances. They indicated that they had experienced some very difficult periods during their school life because of their low socio-economic status. Therefore, the desire to escape from the present poor conditions under which they live, and to be in a position to extricate their families from their present predicament, were used as motivators to achieve their goal of educational success.

The interviews revealed that the resilient children of the PR and SR groups Samples had an internal locus of control, but this factor was less important at the primary education stage but became more important at the secondary school level. This finding was supported by the quantitative data obtained from Nowicki-Strickland Locus of Control Scale which showed significant $p < .05$ differences in the mean scores between the SR group and the other three groups, but the means of the PNR, PR and SNR groups did not differ significantly from each other.

With respect to intellectual ability, there was evidence to suggest that the more resilient the child the higher the level of intelligence and the greater the academic performance. This was revealed in the interview data and the information obtained from Ministry of Education and school documents. In addition, the quantitative results of Standard Progressive Matrices (SPM) analysed in the previous chapter show a highly significant upward trend in the level of intelligence from the least resilient sample to the most resilient sample, with a mean difference of between 4 and 5 points from one sample to the next. Like the quantitative analysis, the qualitative data also showed a strong relationship between internal locus of control and intelligence.

Within poor neighbourhoods there are different levels of poverty. All the subjects in the study are of low SES, but noted earlier some are slightly better off than others. The Social Index analysis in the previous chapter show a significant difference between the SR group and the PNR and PR groups, with no statistical significance achieved between the other contrasts. These findings can be related to the assumption that the resilient children come from a slightly lower level of poverty than the non-resilient children, and as a consequence their parents provided them with a home environment conducive for learning, and took a greater interest in their educational progress particularly in the primary education stage as showed by the interview data. The conclusion therefore is that disadvantaged children who come from slightly better homes have an internal locus of control and a higher level of measured intelligence.

To summarise overall, the educational success or failure of students is their own responsibility, but they need the encouragement and support of others, particularly their mothers, in order to sustain the effort. In this study, to become educationally resilient is to achieve educational success; and to achieve educational success the student needed the presence of protective factors to moderate the effects of life stressors. They needed to be internally oriented, to encounter good and effective teachers, to have a good, harmonious and functioning home environment, to have formed a secure early attachment, and to have a mentor and supportive parents who care.

CHAPTER 1X

FOUR ILLUSTRATIVE CASE STUDIES OF RESILIENCE

The introduction of the child into the environment, his adaptation and his receptivity all develop in stages like links in a chain, the strength of each link determining the value of the whole chain.
Smart 1992: 35

Introduction

In the last two chapters the aim was to identify factors which distinguished resilient children from non-resilient children in the four study groups. The emphasis was the general characteristics of each group. The present chapter aims to show how such factors were expressed in four individual case studies. Each case represents a typical child from each of the four samples investigated in this study. In two of the cases their parents had very poor marital relationships. In the other two households children lived with stepfathers who also had poor relationships with their mothers. There were reported incidents of child, spouse and alcohol abuses in all four households.

However, two of the children were able to overcome the multiple risk conditions of familial and environmental origins, and proceeded to become educationally resilient. According to Radke-Yarrow and Sherman (1988) they have succeeded in minimising the psychological and physiological costs, and their coping styles may have stemmed from inborn strengths as well as protective factors or processes operating in their immediate environments, in spite of the chaos and family dysfunctions. They were labelled primary resilient and secondary resilient. Conversely, the other two children apparently did not have the coping capacity to mediate the debilitating effects of the stressful familial circumstances, and this hindered their chances of achieving educational success. They were labelled primary non-resilient and secondary non-resilient.

All names have been changed, and specific details have been altered to protect confidentiality.

CASE 1: A Typical Primary Non-resilient Child

Background

Tim was born at his grandmother's home in a rural community in St. Lucia; an area where considerable hard work was required to survive. He lived there until he was two years old, then his mother moved in a dilapidated area on the outskirts of a town. They lived there until Tim was five years old and then moved backed to their previous home. There they lived for a further two years before moving to another ghetto area where his family still lives. Tim was the first of two boys and two years older than his brother. There was no father figure. His mother was sixteen years old when she gave birth to him.

The Neighbourhood

When asked to describe the area where he spent most of his time, his initial reaction was *"I did not like to live there"*. The area is devoid of morality and anything aesthetic. The "vices and sins" associated with poor neighbourhoods seem to be common practices: teenage pregnancy, drug and alcohol abuse, child and spousal abuse. In describing the area where he lives, Tim said

> *There is always fighting , cursing, people taking drugs... you hear gun shots sometimes and you smell drugs day and night. A lot of the children do not go to school... The area is very dirty with pigs and other animals... the muddy area is smelling... there is rubbish all over the place. There are no toilets so the people are using their bowels all over the place... they like to gossip...*

This is the community where he lived most of his life; a community with no infrastructural development, social, economic or educational activities, positive role models to identify with, or a support network to seek assistance from. Consequently, throughout most of his life, Tim did not engage in any recreational and/or educational programmes, or any intellectually enriching exercises. Occasionally he would play football on the beach which is not too far from his home.

Early Childhood

During the first few years of his life, Tim reported that he was cared for by his mother, although the quality of parenting was deficient in many aspects. He recalled being placed on the floor on a bedsheet, and left on his own for long periods. According to him *"I can't say she took good care of me because she would leave me there by myself and she would not give me what I needed"*. As a consequence of not being able to provide for his needs he was left hungry quite frequently, and recalled always crying. Sometimes he was given slaps to keep quiet, or his mother would walk out and leave him in the care of his grandmother who would sometimes feed him with "sweetened water". He did not form any attachment with his mother or any other family member, although he was more responsive to his grandmother; but she was not always at home. He said, *"I was not close to nobody because Miss, you see, they did not spend a lot of time with me when I was small..."*

When they changed residence and his mother wanted to be alone, she would put him on a bus with his younger brother and send them to the grandmother's home. When asked about his early relationship with his mother he responded:

> *Not good. I remember from the time I was small my mother would beat me a lot all over my body with whatever she get her hands on, even shoes. She would always quarrel and shout after me... I could not like her; and I think she hated me too.*

With respect to his father, he never lived with them and therefore he did not form a relation with him. Besides, his father never supported him financially or emotionally.

Home and Family Environment and Early Learning

Tim lived in very poor and crowded conditions. He remembered having very few clothes and would always wear old underwears during the day. There were eight family members (including Tim) living in the grandmother's two room house and they were all unemployed. He remembered sleeping on a piece of "foam" on the floor in one of the rooms with his mother. There was no pipe-borne water in the home and

no electricity. The meals given were never enough to satisfy his hunger. The grandmother was the sole provider. She had a small vegetable garden and the money obtained from selling her produce was used to provide the meals; but from all indications, her income was insufficient. *"I never get anything to eat when I ask for it"*, he said; that is why from the tender age of two years, he recalled stealing things to eat from the supermarkets in the area. He said,

> *I remember from the time I was two years I would go out to look for things to eat, and steal from the supermarkets, but they never catch me... I would stay out till night time. When I come home my mother would lock me out so I would sleep under people's houses.*

Tim was never sent to a nursery nor did he attend pre-school. He was deprived of opportunities to acquire the beneficial effects of early education and to socialise with his peers in environments conducive for early learning. This is an indication of a lack of parental interest in his early education (Taylor, 1991). Rather, he was left on his own for most of the day with no one to love him, care for him and to positively influence his personal and intellectual development. He had no educational toys to play with and no story books to read. He had not established any relationship with anyone except his younger brother whom he had to take care of sometimes. There was no one to guide him and teach him the difference between right and wrong, hence from an early age Tim was already engaged in criminal activities.

There was great poverty and deprivation in his life, and as a consequence was unable to develop a resilient physiology hence his high intolerance for colds and ear infection. He recalled always being sick and had an ear operation when he was about three years. Nevertheless, the fact that he was a sickly child apparently did not gain much sympathy from the mother. According to him the quality of parenting did not improve.

Middle Childhood

Home and Family Environment

In mid-childhood his family of three lived in a small one-room wooden house in the ghetto. At nights his mother would use a blind to divide the room so that the two boys could sleep on the floor on old clothes on one side of the room and the mother on the other. The house was not owned by the mother, but was being rented from a woman in the area. The mother was not able to pay the rent, so the landlady had her evicted. Their few belongings were thrown out of the house, and according to Tim *"the pigs came and put a lot of mud on them"*. They had nowhere to live so the man with whom his mother had a relationship with took them in. He was married and lived in the area in a one-room house with his wife and family. According to him,

> *There were eight of us in a small wooden house; it had one room in it. My mother and the man and the other lady (who was the man's wife) were sleeping on the bed and the rest of us sleep on the floor... At nights they would separate the room with a piece of plywood.*

He did not like the home and his stepfather who was very abusive to him, his mother and his wife too.

> *He would put all of us out, close the house to beat my mother inside and his wife too. But his wife left him now; she is living in Castries... My mother and the man and his wife would always quarrel, but sometimes my mother and the wife would get on well.*

The reduce space in the house was always tense. His mother then developed a drinking problem but his stepfather was addicted to marijuana smoking. He believed that his stepfather hated him because of the manner in which he was treated by him. His children also made living there very difficult for him and his brother; they made them realised that they had no right to be there and treated them like intruders. There were frequent quarrels and fights, and he was constantly blamed when things went wrong. He felt unloved, dejected and alone, and hated it. He experienced

feelings of hurt and anger. All he ever wanted to do, and did, was to stay away from the house for most of the day and come in at nights. Sometimes his stepfather would shut him out and he would react by throwing stones at the house. His mother was afraid of his stepfather and so did nothing to make the situation bearable for him. He continued to steal things to eat because he was frequently absent from home when meals were being shared. He reacted to the situation by becoming very rude to his mother, aggressive, and was always involved in fights and using obscenities to people in the neighbourhood irrespective of age.

Beginning of Primary Education

He first went to a Combined school at the age of five years. He recalled always sleeping in school and not doing most of the work. He travelled from the ghetto where he lived to attend school about five miles away. He did not go to school every day. His mother then returned to his grandmother's home to live. The house was about one and a half miles from the school, so he walked to and from school. But after two years at the school, he was transferred to the Infant School in the area where he lived previously. He travelled to and from school everyday sometimes on the bus but most times he walked. While there his attendance was also very irregular. It was at that stage too he got punished at school for being disobedient. He said,

> *I got a lot of licks at school. I was not a good student... it was at that time that I started to run away from school. I did not like school.*

On completing Stage 3 (Grade 3) he stayed away from school for over a year.

> *My mother did not send me, so I did not go. I just stayed around the house and sometimes I would go to the garden with my grandmother.*

His mother moved again and went back to live in the ghetto. He was then admitted at one of the two the Primary schools in the area and placed in Standard 2 (Grade 5) because of his age. He went to school more frequently because he liked the teachers, although he was always involved in fights with his classmates. However, during the

period of Infant and lower Primary education, he received no support from home. There was no one in or outside of the family to motivate him, encourage him to go to school, help him with his assignments, or who took an interest in his educational progress. The only support he received was from his teachers.

The Period of Adolescence

Familial Environment

Tim always hated his home regardless of where it was. His mother have moved three times from one ghetto area to another; but no matter where they lived, the family environment was always the same: tense, chaotic and disharmonious. At this stage of his development his mother developed a worsening drinking problem and also manifested a drug abuse problem. *"My mother is always drunk and she falls all over the place. Sometimes I will feel sad and try and lift her up"*, he said. He has seen his mother buy the marijuana and he too used to smoke it.

> *I have seen it; I even try it already... I use to like taking it but when I went back to my grandmother's home I stopped because she wants me to be a christian.*

It can be argued that Tim's grandmother may have been a potential "mentor", because she was originally the mainstay of the family by growing produce to obtain income to support them, set a good example, and was a devout christian with a strong faith. The question then is, why Tim did not identify more with her? If he had, he might have been "resilient"!

His father was a fisherman but he never took care of the child. He too is an alcoholic. The child has never seen his parents together. According to him, they never had a serious relationship. The period of adolescence was for him a stage in almost an endless cycle of emotional deprivation and deterioration. It was a stage when he was exposed to many adversities and disillusionment. However, in the midst of the gross chaos, he developed an interest in auto mechanics. He pursued that interest for a few months by spending time in the garage near the ghetto, but because

of his stealing habit, the garage owner put a stop to his visits. There again he missed an opportunity to successfully pursue his interest.

The Continuation of Primary Education

At age twelve Tim was promoted to Standard 3 (Grade 6) at the Primary school in the town. He hated it there because of the teachers whom he claimed were *"bad teachers because they would beat a lot"*. He would stay away from school on the pretext that they were not doing any work there. His mother, he said would believe him; but the truth was *"I did not like the school because the teachers were always beating me so I would just stay home."*

During that time Tim still lived with his stepfather. Half-way through the second term his mother took him out of school again. He said,

> *My mother took me out of school, because sometimes when she send me I would not go. I would go and hide under the bush and when the children leave school, I would come out and go home.*

However, he believed that because his mother could not afford to provide him with school books, uniform and regular meals he was not sent to school to complete Standard 3. Nevertheless, during the period that he went to school, his mother did not take an interest in his educational progress. She never enquired about school or his ability to cope with the school work. She never asked to see his report book, helped him with his assignments or ensured that he was given time off to study and complete his home work. She only visited the school when she was sent for by the school Principal because he was always involved in fights. According to him.

> *My mother never encourage me, or talk about school with me, or show that she is interested in my school work... She don even know my teachers.*

At the beginning of the next academic year, his mother transferred him again to the Combined School near his mother's home; he was placed in Standard 3 in order to complete the syllabuses. There he said he encountered a poor teacher, but when he

was promoted to Standard 4 his teacher was good although she used to beat him. His score on the Standard Progressive Matrices given to him by the researcher was forty-four which placed him exactly at the 50th percentile for his age with a Grade 111-. Accordingly, Tim is assessed as intellectually average, yet his Record Card showed a rapid deterioration in performance with most of his test scores in Standards 3 and 4 below level. His Locus of Control score was twelve which compared with a sample Mean of 13.43 which indicated a slight tendency toward internal orientation. Nevertheless, the teachers comments on his Record Card reflected their concern about his physical appearance, attendance, punctuality and initiative in learning, and the fact that he was not getting any assistance from home.

At the end of that academic year he sat the CEE; that was the only chance he had because he had to repeat Standard 3 and he was thirteen years old. He failed with a score of 83 which was below the national mean. He did not expect to pass, but when the results were announced and he realised that he had to remain at the school he said, *"I felt sad"*. However, he reported not being satisfied with the way he performed at school, although he was satisfied with the way the teachers taught at the Infant school and one of the two Primary schools. His Standard 4 teacher, he said did her best to prepare them for the exam; the Principal also helped in the process.

When asked to what he attributed his failure he blamed himself first of all for not taking his school work seriously, and blamed his mother for not taking an interest in his education. He said,

> *I did not study because I do not have books... I just did not prepare and just went and write the exam... I blame myself because I did not take my work serious... and my mother too because she was not sending me to school all the time. Each time she was taking me out of school...*

Tim walked out of his stepfather's house two months before this interview and now lives with his grandmother who wants to convert him to a christian. She is now encouraging him to go school although he is too old now to sit the CEE, she makes him pray and attend church services. Now going to school and church have become

important to him. According to him,

> *I like the way I am becoming now. I have stop smoking marijuana, I am not rude to my mother now, I stop stealing, and I go to school now on my own.*

Summary

Tim, because of the quality of parenting which he experienced in infancy, did not form any early attachment with his primary caregiver or anyone else. He grew up in an unstable and disharmonious environment feeling unloved, insecure and neglected. These very adverse circumstances with unstable family life and neglect were the factors which put Tim at risk. As discussed in the previous chapter these factors can have a negative impact on the child's social, emotional and intellectual development particularly (as in this case) if the period of neglect is sustained over a long period.

His mother showed no interest in his educational progress, and there was no "mentor" in or out of the family (with the probable exception of the grandmother) to inspire and motivate him to learn, to value education or to have high expectations. There were no other positive role models for him to identify with; he did not trust or admire anyone. The only help he got was from his teachers, although he claimed that most of them were "bad teachers". But the fact that he received no support from home, was disinterested in school, and frequently absented himself from classes, prevented him from taking advantage of the education offered by the schools.

He was of average intelligence and was inclined towards an internal locus of control, but these two protective factors were overpowered by the negative effects of his adverse social and material conditions of life and the many other stressful factors which he encountered in his everyday life. From all indications he did not have the ability to cope with them. His manner of coping was to opt-out, hence his aggressive behaviour and constant involvement in fights.

However, despite the adverse circumstances in Tim's life, there were potentially mitigating circumstances namely the grandmother who supported the family, and encouraged him to become a christian, and some teachers who also seemed to be supportive in the primary education stage. The question is, why did Tim not respond to those positive influences in his life? Why did some resilient children take advantage of similar opportunities and Tim did not? What is the difference between him and the resilient children who live under similar circumstances?

In sum, a child who lives in a dysfunctional home environment in a very poor neighbourhood, who did not form any attachment with a mother who showed no interest in him and his education, who did not have a mentor to substitute for the mother to inspire him, and encountered many "poor" teachers during his school life would be at high risk for educational failure. In keeping with Werner's "Balance Theory", the vulnerability factors far exceeded the protective factors thus making it possible for the child to function inappropriately, thereby facilitating the manifestation of educational non-resilience. The fact that he was at the primary school and was unsuccessful at the CEE as a consequence of the above factors, made him a primary non-resilient student.

CASE 2: A Typical Primary Resilient Child

Home and Family Background: From Infancy to Adolescence

Lucia lived with her mother at her uncle's home from the time she was born till the age of two years. The three-room wooden house was located in a sub-urban ghetto. Her mother was not employed and therefore stayed home to keep house for her uncle and to take care of her. Her father did not live there but he frequently came to visit them. When she was approaching two years, her uncle got married and his wife and one year-old child came to live with them. The home situation changed as a result. The uncle's wife worked, and one day she accused her mother of using her baby's things and neglecting her child to spend more time with Lucia. They got involved in a fight, and her mother was asked to find somewhere else to live. Lucia was two

years old at the time and the mother's only child. When asked whether she was close to her mother she replied, *"Yes, although I think my mother used to spend more time with my uncle's child than me."* However, she loved her mother and always wanted to be in her company.

Their trouble had just begun when they left her uncle's house. They moved in with the mother's godmother in the same area. It was a two-bedroom house, but there were eight of them living there. Thus, they had to sleep on the floor at nights on a piece of "foam". By this time her father no longer visited them or provided money for her support. Within six months, her mother decided to move in with a friend in a rural community. The situation there was not any better. There were four of them living in a one bedroom house. Once again, they had to sleep on the floor.

While there, her mother's friend invited them to come and live with her in an area adjacent to the ghetto where they first lived. She left her friend's home to live with her. Cognizance should be taken of the fact that with all these movements Lucia's mother was still unemployed and was dependent on friends for support. *"We did not live there for long"* she said, *"my mother went to live at another friend's home by the..."* This was another crowded and unsanitary area. There were five people in a one-bedroom house. At home the common room was divided into two with a blind to give some semblance of privacy to those who slept on the floor. While there, Lucia's mother met with her (Lucia's) stepfather and moved from that house to live with him in another area. It was also a one bedroom house but for the first time in five years, her mother slept on a bed while she continued to sleep on the floor.

Between the time she left her uncle's home at age two years and age seven years Lucia's had already lived in five different homes all of which were overcrowded. She moved again when she was eight with her mother and stepfather to rent a room at the back of a rumshop in the ghetto. There they lived until she was ten, and then moved into a small one-bedroom dilapidated wooden house next to the rumshop, where they still live. There her mother gave birth to two children ages two years and eight months. Lucia shares part of the common room with her siblings. She does

not like living in the area because she feels unsafe being in the midst of alcoholics and drug addicts. If she had a choice she would prefer to live in a quiet place where she can be safe. The mother is still unemployed and now has two young children to care for. Her stepfather is employed as a sanitary worker. The Social Index score calculated for that family from the questionnaire data was -2.0 which indicates one of the poorest socio-economic conditions encountered in the main sample of 126 subjects.

When asked about her present home environment she said, *"Sometimes good and sometimes its bad"*. She continued,

> *It's good when my stepfather is not drinking. I don't like him when he drinks; he gets violent and abusive. For example, once he took a cutlass and he said he was going to kill me and my mother.*

Her mother and stepfather often quarrel and fight. She has tried to intervene in her parents' quarrels on many occasions. However, since her stepfather threatened to beat her all she does is sit and cry. The fact that Lucia tried to intervene in her parents' quarrels suggests that she was prepared to take responsibility for things going on in the family. This demonstrates a characteristic of resilience.

Her brother and sister are still very young so she has to help her mother with the house chores. Her mother does not have to tell her what to do. According to her, *"I know exactly what I have to do, so I just do it"*. There again, Lucia took responsibility for getting things done at home without any external pressure. This also demonstrates a factor in resilience.

Early Childhood

In spite of, or as a consequence of the instability in their lives, mother and child became attached and spent a great deal of time together. Tim, the first case, also experienced instability in his life. The question is, why did Lucia become attached to her mother under the circumstances and Tim did not?

Lucia and her mother did quite a few things together; for example,

> *We would go for walks, she would tell me stories, and teach me to write my A, B, C and my numbers, but she would beat me if I could not do it.*

She also felt *"...happy and secure"* whenever she was with her mother, although she did not mind being left alone sometimes to play with the other children in the neighbourhood; her mother apparently was over-protective. When asked why she was attached to her mother she replied, *"... because she took good care of me from the time I was born, up to now she is still taking care of me."* Besides, her mother was the only familiar person in the midst of the strangers she constantly lived with. She was not attached to, neither did she form any relationship with her natural father whom she said *"was not caring enough"*.

She remembered being sick as a child and according to what her mother told her she was underweight up to about four years. She was very susceptible to colds and flu and seemed to have a permanent head cold which her mother attributed to the many years of sleeping on cold floors with very little protection. She has a constant "sniff" which she said can be very irritating and embarrassing. But that does not prevent her from getting on with her work. She also spent two weeks at the hospital undergoing surgery for a swollen gland in her back. She was in Grade 5 at the time.

Pre-School Education

Lucia went to two pre-schools. She went to the first one at age two and a half years and stayed there for one academic year. The next academic year she was sent to another pre-school which was located directly opposite the ghetto; one which I am familiar with. Unlike the first school, the latter is under the direct supervision of the Ministry of Education and follows the prescribed pre-school curriculum. However, at both schools the child was taught how to count and write numbers, to write the letters of the alphabet, to draw and form patterns. They also went for walks, had class parties, played a great deal, and learned songs and nursery rhymes. At the pre-

school the child was immersed in an environment conducive for early learning, and socialised with her peers. She left at the age of five years to attend the Infant School with most of the children in her pre-school class. Compared with Lucia, Tim missed the opportunity of attending pre-school which he probably could have benefited from like Lucia did.

Beginning of Primary Education

At the Infant school with Grades 1, 2 and 3 Lucia encountered many good teachers. According to her, *"they taught well and gave gifts to us everytime we do well in class, or they will make the children clap."* She loved to go to school because of the "good teachers", and to socialise with her friends. From that early age she always tried to do her best to get good grades in order to get prizes and stars, and to please her mother. Financially her mother was going through a crisis, but she did odd jobs for people like washing or ironing clothes so she could get the money to buy some of her school text books and uniforms, and to pay facilities fee. Compared with Tim's mother, Lucia's mother is very committed and motivated.

When she left the Infant School in Grade 3 she entered the Primary in Grade 4. There she encountered one "good" and one "poor" teacher. In spite of that she still enjoyed going to school. The good teacher who taught her in Grade 5 wanted to ensure that all his students were promoted to an "A" class in Grade 6, and therefore did his best to achieve this goal. Her performance was quite satisfactory and she maintained her position in the top five in both academic years before she was promoted to Grade 6 at another Primary school. The teachers also rewarded them for doing well by giving them stars and responsibilities. She continued to work hard and maintained her good grades despite her score of forty-seven on the SPM which lies between the 50th and the 75th percentile with a Grade of 111+. This meant that she was assessed as intellectually average. She also had a score of eleven on the Locus of Control scale, compared with the whole sample mean of 13.43 which indicated a tendency towards internal orientation.

Upper Primary Education

At the Primary school Lucia had two classes to attend before she sat the CEE. She was first placed in Standard 3-1 where she claimed she encountered *"a bad teacher who was always in a rage and was beating too much"*. This was the same teacher that Tim encountered. Ironically, it was that teacher who awarded her a Certificate of Excellence in Mathematics. She was also given gold and silver stars for excellent and very good work. These were placed on a chart and placed on the wall for all to see. Lucia was educationally motivated which was one reason why she sometimes worked so hard. In addition, she did not want to disappoint her mother who had confidence in her ability to do well, and made sacrifices to send her to school *"so that I can get a good education and a good job later in life"*.

In grade 7 the teachers were subject specialists, so she therefore had five teachers teaching the different subjects. The teachers worked hard to prepare them for the CEE. They came in early to school to give free lessons to children who were interested and stayed after school to do extra work as well. She told her mother about this who made sure that she attended the extra sessions.

Towards the end of that academic year (1993) Lucia sat and passed the CEE with a score of 118 which was high enough to get her admitted to the secondary school of her first choice. When asked to what she attributed her success she replied,

> *My mother first of all because she really did her best for me... Myself, it was not luck, I know I studied hard; it was hard work and a lot of prayers. My teachers, the way they taught, the lessons before and after school, and I did a lot of extra work at my home.*

In spite of her success she was not altogether satisfied with her performance at school; she referred to the few times when she got low grades. These were bad school days for her, and the days when she was teased about the poor conditions of her home by some of the other students.

Parental Interest in Education

Her mother played the key role in her life and had a keen interest in her educational progress. *"My mother is always making sure that I do my home-work or I find time to study,"* she said. Her mother did not visit her teachers at the school, but she never missed a PTA meeting. There she got the opportunity to discuss her daughter's educational progress with her teachers. She helped her with her assignments sometimes, and always made sure that she was given time off her household chores to study. She has difficulty studying at home sometimes particularly when her stepfather was drunk and the children cried whenever he quarrelled and fought with her mother. But most of the time her mother ensured that the children are kept quiet so that she could concentrate on her work. But she said, *"Even when they are noisy playing or crying, I can still do my work. They don't disturb me now."* She believed that the main reason why her mother took such a keen interest in her education, was because she wanted her to achieve in life what she did not: a good education and a good job.

Her mother was also her mentor. She did not only take a keen interest in her education, but encouraged her to have high aspirations and to work hard to achieve it. She wants to be a lawyer and will continue to work hard to become one. Her mother continues to inspire her, and keeps telling her that she is capable of doing better than she is doing now, and wants her to try harder to improve her grades. Her mother also encourages her to get involved in school life, adhering to the precept that "all work and no play makes Jill a dull girl". As a consequence she is a member of the athletics club and participates in most sporting activities at the school. She enjoys it and intends to become a very good athlete one day.

Summary

Despite the fact that Lucia had a very unstable and traumatic childhood moving from one house to another, she was able to form an attachment with her primary caregiver (her mother). It can be argued that the traumatic experiences resulted in them

forming a strong relationship and becoming dependent on each other. The question then is, why is it that adversity brings some people together but drives others apart? It was this strong relationship which helped in part to buffer the effects of the stressful events in the child's life throughout the different developmental stages. As stated in previous chapters this strong attachment facilitated a feeling of security, self confidence and self esteem.

At school, Lucia maintained good grades despite being only slightly above average intelligence. But the fact that she was inner directed made her determined to work hard to achieve at school. In addition, she encountered mostly good teachers who taught well and gave incentives in an endeavour to get their students to improve their academic performance. She capitalised on the effectiveness of her teachers. However, the most influential person was her mother. She took a keen interest in her education, she constantly motivated and supported her; she was her main source of inspiration; her mentor.

The child was often sick and was exposed to a home environment which was disharmonious, living conditions which were poor and overcrowded, the house was dilapidated, they were economically deprived; all these are stressful factors which can increase a child's vulnerability to educational failure. But amid these adversities she was able to find comfort in her mother's love and constant attention. Her poor home environment did not deter her from doing well and achieving educational success. She had in her life several protective factors which increased her ability to cope with the adversities, and thereby increased her chances of becoming educationally resilient.

To summarise, according to the Balance Theory a child who has more protective factors in her life than risk factors has a good chance of achieving resilience. In the case of Lucia, even though she had an unstable childhood and lived in a poor home environment which was disharmonious, she was able to become educationally resilient because of her strong attachment to her mother, her mother's encouragement and interest in her education, her intelligence, the fact that she had an internal locus of control, encountered mostly good teachers in her primary school life, and had a

mentor. She did exceptionally well on the CEE because of the presence of these protective factors, thus making her "primary resilient".

CASE 3: A Typical Secondary Non-Resilient Child

This case was drawn from the SNR group. Unlike the first two cases, this student was five years on in her educational career, having graduated from secondary school with very poor CXC examination results.

The First Few Years of Life

Rose was the youngest of a family of six including four daughters. At birth, she was detained at the hospital for six weeks because she was born prematurely and weighed only four pounds thought to be a consequence of alcohol abuse. Like the previous two cases, she too lived in a ghetto area in an overcrowded one-bedroom house, and had lived there all her life. Her parents used the bedroom and her brothers and sisters slept on pieces of foam on the floor in the other room, while she slept between her parents until she was about one year. The father, a fishermen, was the only employed family member.

She recalled that from infancy life in the family was very disorganised. She was left in the care of her oldest sister who had little opportunity to attend school consistently because she had to stay home to care for her and to do the house-keeping, because her mother, who had a drinking problem was frequently out of the house. *"She always use to drink, always; and even though I was small I tried to talk to her, but she never actually listen"*, she said. She reported having very little to eat, and was always hungry but dared not cry; rather she got some satisfaction from thumb-sucking.

Rose was not securely attached to her eldest sister, who resented the role of primary caregiver, or to any other family member. When asked, "What kind of relationship did you have with your brothers and sisters?" She answered, *" None (pause), none,*

none, none. Up to today I do not have any kind of relationship with them." From that very early age she learnt to protect herself from the stressful home environment by withdrawing and retreating into herself. Reflecting on these early days, Rose was of the view that she was almost non-existent to her family because she was unusually quiet and withdrawn in a very chaotic and dysfunctional home.

When asked to describe the first few years of her life she answered *"Very miserable; there were too many problems and fighting ".* She recalled the disharmonious relationship which existed between her parents. According to her,

> *Mom and Dad never had a relationship at all because there were always the quarrelling and the fighting you know. I used to hear it (pause); quite disturbing. I would just sit in a corner and cry for a long time.*

Her siblings often got into petty arguments which gravitated into fights; and these were quite frequent. There was no display of affection from them. They seemed to be concerned only about their own survival.

She attended a pre-school at the age of four years. Despite the fact that she was among children her age, she still kept to herself and did not make many friends. However, she participated in class activities and recalled learning the letters of the alphabet, some nursery rhymes, and writing the numbers one to twenty. At that age, Rose regarded school as a place to escape to from home, and therefore always looked forward to going. She spent one year at the pre-school and at age 5 1/2 years she was enrolled at the Infant school.

Middle Childhood

Home and Family Environment

During that stage of the child's development the home situation deteriorated. When she was seven her father moved out of the house to set up home in another part of town with another woman. The mother moved out soon afterwards and went to live

in the country about ten miles away with someone she started a relationship with. The children were therefore left on their own with the hope that the eldest sister who was then sixteen, would take care of them; which she did. It was a great responsibility to place on someone so young. The mother would pop in and out when she was in town, but spent most of her time in the rumshops drinking. The father came in once a week to bring money to buy the food, but the money was usually not enough. Therefore they had to live on the bare minimum; although she felt that surviving was a more appropriate word. She recalled that on some days all she had to eat was a piece of dry bread and juice for breakfast, and the same for supper. She would stay at the school at lunch time because she knew that she would get no food if she went home. Her few friends at school would share their snacks with her.

To help the situation her eldest brother, then fourteen, got a part time job unloading goods from a truck for a supermarket owner. As a consequence he was absent from school at least two days a week. But instead of improving with the additional income, the home situation continued to decline. Her sister got pregnant and gave birth to a baby girl. Thus the limited finance which they lived on was further stretched. The house rent had to be paid, the family was now seven with five of them still of school age and had to be provided with food, clothing and books, which was a monumental task. She suffered quietly. She was often hungry, had only one school uniform which she kept very clean, and had no school books except one or two exercise books.

At the age of eight years Rose learnt to do things for herself because *"My mother left me with my sisters but not even my sisters had time for me; nobody had time."* She was under the impression that because she was the last they did not really care about her. She continued, *"... I had to learn to comb my hair, bathe, iron my clothes, cook, yeah! From age eight!"* The fact that Rose "took responsibility for herself" demonstrates a pre-requisite for resilience.

Lower Primary Education

Rose enjoyed her years of schooling at the Infant school. According to her, *"...being young you enjoy anything at school."* She said,

> *I can always remember the noise the kids kept you know, because everybody was kind of like happy although we all came from different background... I made quite a lot of friends.*

She recalled that Infant school was a lot like pre-school. She played a great deal, never sat in one place for too long, but did her class work when she had to. She liked her teachers. They were very kind to her. She remembered being given a lot of individual attention; for example, she spent time at their desks where they held her fingers to teach her to write properly, or teach her to read. All these positive experiences might be expected to have increased her chances of resilience.

The Period of Adolescence

Home Environment

There were no significant changes to the home environment, except another addition to the family. Her sister had a second child; her brother was now out of school and working full time at the supermarket packing the shelves and unloading the truck. Both parents still live away from home. Her father still gave money to help buy the food, but he too developed a drinking problem. Her mother had now developed a serious problem with alcoholism but refused to seek help because she felt that she did not have a problem. There was no proper supervision in the home, no discipline was enforced, no house rules, *"...everybody was just doing their own thing."* The home was still devoid of emotional support, educational resources, and there was no one to discuss anything with or hold a proper conversation with. This obviously affected her language development.

It was also very difficult for her to study at home therefore she spent her evenings after school in the library, particularly when she got to Standard 5; an indication of being educationally motivated. The constant arguments, babies crying, the close contact with other people due to the overcrowded conditions, and the fact that she had none of her school text-books or anyone to help with assignments contributed to that factor. However, despite these risk factors and despite the fact that she came from one of the most chaotic home environments, she was able to keep her reactions to the stressful home situation hidden, did not break into overt behaviour, and survived primary education by attending to herself. In other words, she became PR.

Primary Education

This stage of education was totally different from the two previous stages. This was how Rose described it:

> *At the primary you know it was a bit more serious; hard-working, every time you go home you have homework, and piles of homework too. You had to do it or else you get punished the next day for not doing it. I tried very hard...*

There were class and school rules which had to be followed; students were often punished for disobeying them: detention, suspension, corporal punishment and writing lines. She tried hard to obey the rules so she would not have to be penalised. She recalled the work getting increasingly more difficult from Standard 3

> *because we know that we had to go to Standard 4 to sit the CEE; but I was always counting on going to another school.*

Rose had a score of forty-seven on the SPM which lies between the 50th and 75th percentile with a Grade 111+ indicating that she was intellectually average. Her LOC score was seventeen compared with a sample Mean of 13.42 which is a clear indication that she is externally oriented, and would therefore need the support of external forces to help increase her chances of educational success.

When asked "What can you remember about the teachers who taught you at the primary school?" She responded,

> *They were good teachers yeah, because... I could have talked to them about things at home... No matter how many times I say that I don't understand something, they will go over it with me.*

They encouraged her to work hard and sometimes kept her back after school for a few minutes to explain work she was having difficulty understanding. At the primary school the students were given incentives to improve their academic performance. When asked whether she was ever rewarded for her work she replied,

> *Yes, I usually get stars on my exercise book. The funny thing about it is when I go home all my exercise books are in my bag. I never had anybody to show the stars to. I was proud of it (pause). I was actually proud of it.*

She was also a very good netballer and was appointed the captain of the school's netball team when she was in Standard 5. Toward the academic year in Standard 4 Rose sat the CEE, but despite the fact that she scored 102 which was above the national mean of 100 it was insufficient to get her a place at the secondary schools of her choice. All her friends succeeded and left; but that she said actually motivated her and increased her determination to *"see what other schools are like"*. She was twelve years old at the time and therefore had a second chance to sit the CEE in Standard 5. According to her this second year was the only time in her school life that she can recall having to work so hard. Her efforts were rewarded because she was successful at the second attempt.

She attributed her failure at the first attempt first of all to her parents for not being there when she needed them the most, to the fact that she had no text-books to study from and nobody at home to offer her any help or to take an interest in her educational progress, and herself for not studying as hard as she should have done. Her parents, she said, never visited the school not even to attend PTA meetings, so she would keep all notices and letters addressed to them. Nobody signs her report book; she does, on behalf of parent or guardian.

With regard to her success at the CEE, she attributed it to the fact that she was motivated by her friends departure to other secondary schools, hard work and encountering very good and strict teachers. Some of them gave extra lessons but although she could not afford to pay, they allowed her to attend because of her interest. But there was one teacher in particular, her Mathematics teacher, who really contributed to her success through her consistent mentoring. She also devoted time for prayers and went to church regularly because she believed that faith in God was essential if she was to succeed.

Secondary Education

At the secondary school too she encountered good teachers, but the system was entirely different from that of the primary school. There the teachers specialised and with a thirty-five to forty-minute teaching period did not have time to give individual attention, therefore a great deal depended on students initiative to learn. This could have posed a problem for students such as Rose with an external LOC who need positive responses from others.

It was also very challenging at the secondary school. There you had to compete with the best students from other primary schools, most of whom came from better-off families. However, Rose continued to work hard to maintain her average grades but it was not always easy. She still went to school without text-books because she could not afford them, but occasionally would borrow books from her friends to do her assignments at home in the early hours of the morning, or spent time in the library to work. Her Record Card showed that she performed reasonably well on her exams throughout Forms 1,2 and 3 but her performance began to decline from Form 4 and this was reflected in her exam grades. When asked the reason for the decline she replied,

> *When I came to Form 4 you know, I still had the will to learn; I wanted to learn, learn and all of a sudden it just stopped. To me I did not want to learn anymore. I began to follow some of my friends and you know they usually skipped classes, and I would be with them too. I did not want to learn anymore, I did not want to go to school anymore, but it was better than staying at home.*

There was a lack of concern and involvement in school life. She began to day-dream in the classes that she attended, and reported just sitting there bored and

> *...would always think of the things I didn't have. I was jealous of the school children because I used to see all those girls there, they always used to have lunch and I never used to have. Just imagine sometimes I couldn't wait to go home, because I would feel so lonely.*

At that critical point in her school career Rose probably realised that she could not compete with the other better-off girls. In addition, the increased problems at home, and the perceived futility in trying to acquire a good education may have caused her to "give up the struggle". When she got to Form 5 the situation worsened. She recalled always suffering from stomach cramps and felt *"really down because of all the trouble at home; it really used to weigh down on me a lot."* According to her,

> *I would sit in class and my mind would just drift and I would just think of home. Sometimes I go home and for the whole day I haven't eaten and would just sit there, just sit around and do nothing. When I did get something to eat it was usually bread and juice because nobody had money or anything like that.*

She recalled saying repeatedly to those who tried to get her to work *"I can't take it any more!"* For a while she thought that she was actually going crazy because she couldn't stop herself from saying *"I cannot take it again and I won't!"* Besides, she did not see the point in studying hard because nobody really cared. *"So who am I doing it for"?* she asked. This is an indication that as an "external" the recognition of others were important. She was not doing it for herself. Even in the primary stage she was working to keep up with her friends whose approval she probably valued.

However, the school paid her external examination fees because there was no response from her parents. She was registered to write six subjects including three at Basic level. She got a General 2 in Integrated Science but failed all the other subjects obtaining Basic 3 in History and grade 4's in the remaining subjects. She was not surprised at the results; she said it could have been worse.

She attributed her failure to parental neglect. *"I always wanted my Mom and Dad there with me",* she said. At that point the child got very emotional and bitterly remarked:

> *Maybe they shouldn't have me at all. Sometimes I say maybe they should just let me die and finish instead of allowing me to grow up and go through that hell, that hard time. I still feel hurt every time I look at them and just feel like screaming at them. What kind of parents would treat their children like that, eh?*

She received no support from her siblings because by the time she was ready to write exams, her oldest sister now had four children of her own to take care of, and the others had two and one respectively. Her oldest brother, who was in a position to encourage and support her had moved out of the house. She also blamed herself for her failure by being *"... lazy, plain lazy. I didn't want to push myself again that's all."* By then she had given up regular church services and did not pray as much as before.

Since leaving school she ceased to be concerned about the future and had no intention of studying again. *"All I want to do now is to relax, just relax, sleep and listen to music and get lost."* According to her, there is no point applying for jobs anywhere because she was not qualified to do anything. Besides, *"there are very few jobs available anyway."*

Summary

Rose grew up in a very run down neighbourhood, and lived under very adverse conditions with parents who had a poor marital relationship, and inadequate educational background. They were both physically and psychologically unavailable to their children, and this apparent parental neglect negatively affected the child who always needed her parents to be involved in her personal and intellectual development. Rose did not form any secure attachment in the first few years of life, but retreated inward as a means of coping with the stressful home environment. She had no intimate relationship with her parents or any other member of her family. She

received no encouragement from them, and no one was interested in her educational progress.

School was, for her, initially a way of temporarily escaping from a chaotic and dysfunctional home. There she made friends and encountered very good teachers (particularly at the primary school) who assisted her in many ways to ensure that her chances of succeeding the CEE (at the second attempt) were enhanced. With hard work, average intelligence, and very good teachers who consistently mentored her, she was able to overcome the effects of her stressful family circumstances and achieved educational success.

While at the secondary school her home situation continued to deteriorate. (This was reflected in her Social Index Factor on the questionnaire which was -.55.) She encountered mostly good teachers, but they could not be compared with the primary school teachers: they did not take a personal interest in individual students, although once a year they would reward students for good performance. The onus was on the student to want to learn. An "external" student experiencing stress would find this difficult. Towards the end of secondary education Rose lost the initiative to want to learn; all the years of stress began to take effect and she did not have the capacity to cope with it. An important point also was that she had no one she was working for - parents, siblings, friends, teachers were all beyond her world. Therefore, she took the easy way out by simply giving up. The risk factors were too overpowering.

In sum, Rose became primary resilient because she was able to successfully negotiate the stressful events in her life, as a consequence of the protective factors present at that time namely, teacher effectiveness, a mentor, intelligence, and faith in God. With the exception of intelligence, the remaining protective factors disappeared particularly in the last two years of secondary education, and the risk factors increased thereby increasing her vulnerability to educational failure. As a consequence of her inability to cope with them, her academic performance declined and this subsequently affected her performance on the external CXC O'level examinations, making her secondary non-resilient.

CASE 4: The Typical Secondary Resilient Child

This fourth case was drawn from the SR group. Unlike cases 1 and 2, this SR child had received five additional years of secondary education. He graduated from secondary school with excellent CXC examination results which gained him a place in the Division of Arts and General Studies at the Sir Arthur Lewis Community College.

The First Years of Life

Growing up was for him the worst time of his life. He wanted to be different and did not want to be like his father. *"Boys"*, he said *"usually grow up to be like their father, I hope it never happens to me."* He definitely did not want to be like his brothers.

From infancy Paul lived in a sub-urban ghetto which is noted for its violence and drugs, and everything associated with it. He lived in an overcrowded one-bedroom house with his parents and seven siblings. He was the third of seven children including four boys. *"My two older sisters slept a small distance away from us boys on the floor, and my parents slept on the bed"*, he said.

His mother was the primary caregiver and his older sister (by eight years) was the secondary caregiver. He felt closer to his sister, but in the first two years of life he preferred his mother to take care of him because he felt safer and more secure in her company. According to him,

> *We did things together. She would bathe me, comb my hair, she taught me to pray; but during the day she was too busy doing things around the house... but at nights I spent a lot of time with her.*

Nevertheless, he also enjoyed spending time with his sister. She was still attending the primary school. He can remember her putting him to sit on her lap while she read stories to him. His father did not play a part in his upbringing.

He did not feel attached to his mother although she took care of him as an infant. He felt that his mother had been closer to his father and very subordinate to him. He recalled from a little boy growing, whenever his father arrived home he always wanted something done for him. He said, *"My mother would forget we are there and attend to his wishes."* He felt jealous because his mother seemed to be spending more time with his father, and as a result gradually drifted from her and was drawn closer to his sister.

His mother, he believed was incapable of showing affection and that in part affected his early relationship with her. He said,

> *I did not feel close to her. I knew that she loved us but I never had a mother-son relationship with her. She was very passive.*

But that did not seem to affect him that much because he had his sister to turn to who was always willing to spend time with him. He recalled,

> *I can't remember getting hugs and kisses from my mother...She has never told me she loves me; and I have never told her I love her either...*

He complained about the episodes of severe beating from both his parents. Everybody got beatings irrespective of age, because his parents believed that this was the best method of discipline. That kept them away from their parents. He said, *"That closeness between parents and children gradually began to disappear when the beatings began."* His sister would beat them too being the eldest, but not like their parents. However, from about age four to five he felt more at ease being around her than in the company of his mother. There was a great deal of tension being around his mother.

He did not attend any pre-school and therefore was deprived of an opportunity to socialise with children of his age in an environment conducive for early classroom learning. At age six he attended the all boys' Infant School in the city centre.

He had a close relationship with his younger brother because they played, climbed trees and did things boys of their age would normally do. But he was shy and did not play as much as other boys. However, he tried to overcome his shyness and nervousness by taking part in activities where he had to express himself verbally.

He did not have a good relationship with his older brothers. He said,

> *Sometimes we would be close and other times we would fight. So the word impartial comes to mind. I find it very difficult to speak to them.*

Growing up they fought for petty things. They did not get what they wanted, so his brothers would take whatever they wanted if it was available in the home. If his mother could not find out who took it, she would beat all of them. He recalled being beaten several times for taking food which he never took.

His worse beatings came from his father. He explained, *"My father used to beat me so severely that I still carry some of the scars I got from him."* He does not want to be anything like his father whom he described as being *"very abusive, arrogant, had a temper and no ambition."* He had no relationship with his father and this was in part due to the fact that his father would physically abuse his mother. For example, *"He would drink a lot and come home and just start to beat my mother, so my sister and I disliked him for that."* His father never took an interest in his education, did not see the point in getting one, and would therefore switch off the electricity whenever he stayed up to study at nights. His father told him to use the sunlight instead because he had to find the money to pay the electricity bill. He bought candles or stayed after school to work in the library. Now that the father is deceased, *"... we try to heal some of the scars and old wounds he left behind, but it is not easy."*

However, after his father's death the home conditions declined. He often wondered what his father did with all the money he worked for because their lifestyle never

improved. Instead, it deteriorated and his mother really had to scrounge to get a decent meal for them, which was not always possible. By then his mother had developed a drinking problem and kept his brothers and sister at home from school for long periods. He liked school because of the goal he wanted to achieve later in life; and even though his mother had no breakfast or lunch to give to him, he went to school.

It was very difficult to study at home. According to him,

> *I wanted to work hard to improve myself, and wanted to go further than my sister and brother who just went to primary school, but there was so much noise going on at home; even now there is still a lot of noise and I just find it difficult to study.*

There was one consolation however, with his father dead there was not so much disorder and tension, and he could now *"burn the midnight oil"*.

His mother has been very passive in her show of affection, but when it came to telling them what was right and wrong and disciplining them, she was very powerful. This is a quality that Paul would like to emulate. He did not discuss or talk much to his mother. Money was a big problem at home. Thus, he knew that he could not get anything from her so he did not ask for anything. He went to his sister if he needed something desperately.

There were some good qualities in the family. Despite the hardship they endured they all went to church and they all prayed. *"We always prayed. That was the one good thing about my father. He would insist that we pray."*

After his death, Paul continued to pray because, as he put it, he wanted God in his life because he had faith in Him and thought he had an obligation to fulfil. He recalled buying a book about Jesus when he was at the primary school and kept it very close to him. The other good thing was his parents' ability to keep them from *"immorality in the society"*. With respect to organisation, everybody had their chores to perform. There were house rules which the mother made and enforced.

He has always been a sickly person. Like Rose he was born prematurely, and was detained at the hospital. This was one of the many times that he had been hospitalised; these were not pleasant experiences for him. He had problems with his eyes and skin, and still does; but finds it difficult to find the money to visit the eye and/or skin specialist. He goes blind in one eye for brief periods but has not been able to rectify the problem due to a lack of finance. He also gets frequent bouts of stomach upset.

His two oldest sisters and older brother have now moved out of the house, but he is still looking forward to the day when he will be able to have a room and a bed of his own.

Education

Infant and Primary Education

As stated above, Paul first went to school at the age of six years. He spent 1 1/2 years at the school and was transferred to a Combined Primary School which was newly constructed close to his home, in an endeavour to alleviate the overcrowding problem in the city schools. *"I did not like the change because I had to start all over again, to make new friends and meet new teachers",* he said.

He did not get that much work done at the Infant School. This year and a half was for him a period of orientation to early learning and early socialisation; both are factors which could have been achieved in pre-school education. However, on entering the new primary school, Paul was placed in Stage 2 (Grade 2). He took a long time to settle, kept to himself most of the time although he claimed that he "... *always tried to fit in".*

Throughout primary education, Paul encountered mostly good teachers who thought he had potential and helped to develop it to the fullest. He did not develop close relationship with any one teacher, but reported that they helped and gave him that

extra push he needed in order to be educationally successful. According to him, *"From primary school, the responsibilities the teachers gave me indicated that they had confidence in me."* He was class prefect in Standards 2 and 4, and abused his authority sometimes particularly when children from better-off families acted negatively towards him. There was an incentive system at the school whereby students were given stars, pencils and exercise books for good academic performance. This he said motivated him to work because it was only other way to get the exercise books which he badly needed.

Paul had quite a few bad days at school. When asked to describe a bad day he replied,

> *Carrying water before school, arriving late, being beaten at school, not having a good breakfast and having nothing to eat for lunch or break at school, and that was usual.*

Although these are home-based problems, they greatly affected his time at school. When questioned about how he coped with the situation he said,

> *I tried to cope and blocked everything that happened at home from my mind, and tried not to think of where the next meal was coming from... The bad days were not due to the teachers.*

Throughout primary education Paul performed satisfactorily. He did his utmost to produce good results. His sister was the only person at home who was keenly interested in his educational progress. She motivated him, helped him with his assignments, checked his report book and helped him with his chores so he could be punctual for school. His parents were quite indifferent to his education. At this stage, his sister seemed to have been his "mentor" and not his mother as was the case with most PR children.

When the time came to sit the CEE, Paul did not really think that it was *"a big thing"*. Thus, he thought that if he could pass his class exams he could pass the CEE without much hard work; therefore he did not prepare for the exam. When the results were released to the schools, he failed; he had a score of 98. *"I realised that*

with a little extra work I could have passed", he said.

He had a second attempt at the CEE, and this time it was different.

> *I prepared. Failing the first time caused me to pass. The class teacher motivated us; he wanted all his students to pass. I took extra lessons, I studied hard, I just knew that I had to pass.*

This was the only chance that he had left to enter secondary school, and to pursue his life's ambition. By this time, there was no one to motivate or support him because his sister had left home. His mother was illiterate and did not concern herself with his school work; that was, in part, why his sister initially played a greater part in his educational development. The onus was now on him alone to initiate his educational success at this level of primary education. However, he was fortunate to have Mr Stan, a teacher, who took an interest in his education and acted as his mentor and gave him after school lessons without costs. All he wanted in return was success at the CEE. He sat the exam the second time and passed with an excellent score of 117. He gave most of the credit to his Standard 5 teacher and the teacher who acted as his mentor. He also attributed his success to his hard work and the fact that he prayed constantly to the Almighty Father.

Having passed the CEE Paul did not attend secondary school immediately, because his parents could not afford to send him to one. He therefore returned to the primary school to continue his education. With the help of his mentor and the school's principal who negotiated a bursary for him with the Ministry of Education, he was able to attend secondary school in the third week of the new academic year.

Secondary Education

He was the first of his mother's children to go to a secondary school and the Community College, and his older brother and sister resented him for this achievement. However, he is helping his younger brothers so that they too could achieve the same.

At the secondary school he never looked back. His teachers spoke very highly of him. He participated in almost every school activity, both educational and sporting. He represented the school in Mathematics and debating competitions. He was also a member of the Student Council for two years and the treasurer in Form 5. This he said helped him to decide the area he wanted to specialise in and his subject choices. He wanted to study Law and Political Science so he specialised in the Arts. He selected eight subjects including Mathematics and English Language which are compulsory subjects, History, Social studies, Geography, French, English Literature and Principles of Business. He was determined to work hard in order to succeed all the subjects with Grades 1 and 2, and to meet the matriculation requirements for entry into the Community College. This he did and was rewarded with CXC O'level passes in all eight subjects with six Grade 1's and two Grade 2's. With money earned from holiday jobs and assistance from his sister, he was able to accept his place at the College in the Division of Arts and General Studies, where he is currently pursuing three A'level subjects in the Arts. While looking for a holiday job to raise money to pay his school fees, Paul realised the importance of a good secondary education and particularly A'level education. He said,

> *It was such a big thing watching students go to A'level College... Now that I am there, I am just beginning to realise what a great feat I have accomplished because only three of us from the school were able to make it there. I am very grateful to my teachers for helping to make it happen.*

Despite his achievements, life for him at the secondary school was not always easy. He was constantly teased by children from advantaged homes who never ceased to remind him of who he was or where he came from. They tried their utmost best to demoralise him. He said, *"They looked down on me and turned their nose up at me and my complexion."* He has a permanent skin disorder and scars from his father's beatings. According to him,

> *I sort of feed on that and whatever they feel that they have over me. I showed them that they are not so much better and I feed and motivate myself on their negative attitudes toward me.*

However, he was happy about the fact that his family was socio-economically deprived. He believed that he would get very lackadaisical and would not work hard at school if the situation at home was different. But his mother's comfort and their home situation are the most important things to him presently. He wants to prove to her that she has produced someone who can help her get out of it. This is the driving force behind his educational career. The question is, why is it that Paul sees his deprived home background as a driving force pushing him forward, while others see it as something holding them back?

Summary

It was a turbulent childhood for Paul in a very stressful home environment. He formed no secure attachment with his mother who was the primary caregiver, but had a strong relationship with his oldest sister. She took an interest in his education, and acted as mother substitute by encouraging and motivating him to do well. His parents did not play a part in his educational development. His teachers did at both the primary and secondary level. But one teacher in particularly acted as his mentor and was in part responsible for his success at the primary education level.

With a LOC score of 14 which was above the sample Mean score of 13.43, Paul was slightly inclined toward externality. Despite being of average intelligence with an SPM score of 46 Grade 111+, he was able to do exceptionally well on the CEE (second attempt) and the external CXC O'level examinations. His Grade 111+ placed him between the 50th and the 75th percentile.

In sum, despite the dysfunctional home environment, episodes of child abuse, poor health and hospitalisation, parenting deficits, lack of parental interest in his education and constant hunger, Paul was able to overcome these risk factors and become primary and secondary resilient. He successfully completed the CEE and the CXC O'level examinations, and attributed his educational success to the protective factors which were present in his life namely, having mentors, intellectual ability, teacher effectiveness, faith in God, and determination to succeed.

Case Analysis Findings

I have presented case descriptions of children drawn from each of the four samples in this study, in the hope of discerning factors and processes whereby a child succeeds or fails to cope with adverse circumstances. Each case study was approached against a background of information from both the individual and group data, and provided me with information that will allow some tentative conclusions concerning how these children were able to or unable to cope with their stressful life events.

Each of these children came from multiple problem families, and live in dysfunctional homes with parent (s) who were alcoholics and where spousal abuse occurred quite frequently. Each child experienced some degree of family instability and disorder, socio-economic deprivation, hunger, and with the exception of Rose, a lack of parental support and affection. The quality of parenting with respect to Tim and Rose and to a lesser extent Paul, was deficient. Hence, no early attachment was formed between these three children and their parents.

The four children are not entirely healthy, and good health is one of the necessary components for the fight against stress. Each child developed some ailment during childhood which persisted to the present stage, but Rose and Paul were also born prematurely and were detained at the hospital.

Tim did not place any value on himself, education, or his ability to do well. He did not attend pre-school and therefore did not benefit from its positive effects. In contrast, Lucia and Paul, and to a lesser extent Rose demonstrated a core of positive self-esteem in the initial stages of their education, but whereas Lucia and Rose benefited from pre-school education, Paul did not because he first went to school at the age of six years. Tim constantly talked about not liking school particularly in the early primary stage and in Standard 3. In contrast, Lucia, Rose and Paul reported that they enjoyed infant/primary school and always looked forward to going to school.

Lucia, Rose and Paul had mentors (mother, teacher, and sister respectively) who encouraged, motivated, and inspired them to achieve educational success in the primary education stage. They encountered mostly good teachers and took advantage of that situation. There were positive school reports about them. Tim, on the other hand, had no one at home to love and support him, encourage and motivate him to take an interest in his education. But during the time that he lived with grandmother, who herself was resilient, Tim could have taken advantage of this opportunity to identify with her; but he did not. Also, there were some teachers who were supportive, but Tim did not capitalise on these positive influences either. The teachers' comments on his Report Card reflected his failure as a student.

The four children were of average intelligence, with Tim and Lucia having a slight tendency toward internal orientation, Rose with a clear indication of externality and Paul slightly inclined toward externality. However, despite being of average intelligence, they achieved different levels of educational achievement. This is an indication of the degree of application by each student, the number of stress factors they had to cope with, and their success or failure in their ability to cope. It would seem that the children needed the presence of protective factors in their lives to mitigate the negative effects of stressors, and to enhance their coping capacity.

However, having become PR did not put such children outside the influence of increased risks. With respect to Rose there were hidden costs which later manifested in the secondary education stage. She was pushed as a child to achieve maturity beyond her age, and did not have the opportunity within her family to make demands on her parents and have her needs met. In addition, the stress factors multiplied, making it highly impossible for an "external" to cope and become SR. The question is, why didn't she seek to identify with some significant non-family adults to provide her with support and inspiration rather than just give up? The research literature on children who have survived from lower-class environments (Garmezy, 1983; Rutter, 1983) identified the importance of the significant other (usually non-family adults) for providing the disadvantaged children with opportunities.

In all four cases, however, I believe that the children are vulnerable to educational failure because they undoubtedly lived in very adverse circumstances with an unstable family life. These were the circumstances which put them at risk of this negative outcome. However, there were also potentially mitigating circumstances, Lucia and Paul took advantage of them but Tim and Rose (particularly at the secondary school stage) did not. The situation had become so stressful that they manifested behaviour problems, which probably was their way of calling for help and of attempting to continue to function. Tim's style of coping was acting out, and got him the "bad" boy label. Rose initially coped by using the denial method which can be a costly way of coping, but at the secondary education stage she too started to "act out". Rose is at a turning point in her life, and what I cannot know is what path she will eventually take. Tim, for the time being, has been rescued by his grandmother. It would be interesting to see how he moves into the young adult development stage.

Lucia's and Paul's styles of coping have not involved acting out as Tim's case, or denial as Rose's case. Their coping style was more open, and this may help them to continue to be educationally resilient. They expended large amounts of energy in their studies in an endeavour to get high grades and boost their self-esteem. If their present situation remains at it is or gets better, and they continue to be educationally motivated, with good teachers to teach them, and mentors to inspire and motivate them, I see no reason why they cannot achieve their goal in life.

CHAPTER X

CONCLUSIONS: IMPLICATIONS FOR POLICY AND FURTHER RESEARCH

"Unless we look at a person and see the beauty there is in that person, we cannot contribute anything to him or her."
Anthony Bloom (1995)

Introduction

St.Lucia is a volcanic island located in the eastern chain of Caribbean islands. It is frequently referred to as the "Helen of the West", because of its natural beauty and lush green vegetation. The island, like the rest of the Caribbean has a history of slavery and colonialism. The present family structure, the systems of government and education, and the economic structure are legacies of its colonial heritage.

The people of St.Lucia's recorded history were poor and illiterate. They were exposed to the brutality of slavery, indentured labour, wars, hurricanes, floods and landslides; but many survived. These terrors should serve as a reminder of how vulnerable human beings are irrespective of their nationality. However, despite the centuries of deprivation St. Lucia survived and is now an independent state doing what it can for its people.

History has shown that despite the very adverse circumstances which St. Lucians had to live with, many people showed resilience and did not succumb to these stressful life events. This resilience among some poor St. Lucians paved the way for the resilience of the individual child of poverty.

Lately, researchers pioneered by Norman Garmezy and his colleagues and Werner and Smith, began to search for the roots of this resilience, *"for the self-righting tendencies within the human organism"* (Werner & Smith, 1982: 152). This present study brings us another step closer in search of the sources of strength in vulnerable human beings. It is unique in its social and cultural context, methodological approach and definition of resilience. Thus, this uniqueness makes it impossible to implicate

findings of educationally resilient children with other research studies of resilience where vulnerability and resilience are defined differently. However, there is universality in the effects that stress and protective factors may have on children who are at high risk of educational failure.

This final chapter presents the findings, conclusions and limitations of the study, and also outlines guidelines and strategies for prevention and/or intervention. In light of the methods used the conclusions are tentative, but they may pave the way for further research on resilience in the other Commonwealth Caribbean islands and the wider world.

Working Model of Resilience

The present study worked within a model of resilience which was designed to identify the protective factors and protective mechanisms operating in the lives of disadvantaged children who were born and reared in poverty by mothers with little formal education, and who had encountered stressful adverse circumstances as a consequence of their low socio-economic status. These stressful circumstances increase the risk of educational failure; therefore children exposed to them were vulnerable to that adverse outcome. Resilience in this study was defined using the concepts "vulnerability" and "competence". Children who were vulnerable yet achieved competence were deemed resilient. Competence in this context was defined in terms of educational success, and vulnerability in terms of adverse socio-economic circumstances. Thus, educationally resilient children were those children who achieved educational success despite being exposed to adverse socio-economic conditions which put them at risk of educational failure.

The model made reference to the stress level of individual children, and this stress level was measured by the number of risk factors to which the child was exposed, and the number of protective factors in operation. For example, a child who was exposed to numerous risk factors with few protective factors in his/her life, was more inclined to experience higher stress than a child exposed to a few risk factors and numerous

protective factors. Therefore the highly stressed child was more at risk of educational failure than the child who experienced moderate stress.

Educationally resilient children identified in this study experienced a lower level of stress as a consequence of protective factors which caused an "imbalance" in the risk-protective factor ratio. They were not entirely free of stress. In fact, they experienced high stress but demonstrated the capacity to cope with it better than those who succumbed to it. By successfully negotiating the challenges imposed by the given risk factors they became educationally resilient.

However, to effectively adapt this model of resilience a number of variables hypothesised as protective factors that increased the chances of educational resilience were explored and measured. These concepts include early attachment, socio-economic conditions, parental interest in education, having a mentor, teacher effectiveness, locus of control, and intellectual ability. Following is a brief resumé of each hypothesis tested with evidence indicating the extent to which it supports or rejects the null hypothesis.

A Brief Resumé of Hypotheses Tested

Hypothesis 1

Educationally resilient children had formed a secure early attachment with the primary caregiver.

The effects of early attachment could only be inferred retrospectively from the mother-child relationship in late childhood, adolescent and young adult development stages so that adolescents having a strong relationship with their mother or primary caregiver, were likely also to have formed an early attachment. Although a few educationally resilient children had not formed strong attachments with their mother or primary caregiver, such an attachment seemed highly conducive in helping many to cope with the stressful adverse events and circumstances to which they were

subjected. This finding was in keeping with the transactional model (Wertheim, 1978) which stipulated that a strong mother-child relationship from a very early age can result in a sequence of positive interactions over time, and subsequently produce a desirable upward spiral of positive behavioural adaptations. In addition, and from an organisational developmental perspective (Egeland et al, 1993) the finding also suggests the importance of experiences acquired in the early developmental stages in critically organising later experiences. Conversely, the majority of non-resilient children did not form secure early attachment with the primary caregiver, neither did they establish any meaningful early relationship with parents. This could have hindered their ability to cope with the stressful events in their lives, subsequently making them increasingly vulnerable to educational failure. Therefore, it was difficult for them to have long-range results of success with respect to their educational progress.

There was evidence to suggest that insecure attachment was usually accompanied by inappropriate child-rearing practices, and these could place a child at risk for failure to maximise intellectual potential in the years beyond infancy. Therefore, it is not presumptuous to conclude that educational failure is, in part, a consequence of insecure early attachment. Conversely, secure attachment was strongly associated with positive child-rearing practices, and these may have enhanced a child's chances of educational success in the subsequent developmental stages. This finding strongly supported this first hypothesis. It emphasised the importance of the first few years of life, which were of vital long term importance (Clarke & Clarke, 1976) and critical to the child's subsequent developmental progress. It highlighted the significant impact of early childhood deprivation such as a severe lack of cognitive and emotional stimulation, which may have led to intellectual dysfunctioning. However, it must be noted that if there was significant discontinuity in the child's adverse early environment, to one which was modified with protective elements, the child was likely to function and achieve educationally. This was evident in the lives of two resilient children.

Hypothesis 2

High-risk children who came from good functional homes were inclined toward achieving educational success.

All the children in the main sample live in poor neighbourhoods and were of low socio-economic status, thus placing them at risk of educational failure. Taken as a whole, the resilient children were slightly better off in socio-economic terms than the non-resilient children. The majority of educationally resilient children lived in functional homes, although not entirely free of stress, which provided an atmosphere conducive for learning. The protective mechanisms being the children's ability to study and do their home-work without too many interruptions and distractions, educational books in the home, and the harmonious familial relationships and support which existed there. However, cognizance should be taken of the fact that there were a few exceptions particularly among the secondary resilient children. The non-resilient children lived in home situations which progressively deteriorated and where there were obstacles for learning.

In the case of the secondary school children who did not achieve educational success, there was significant discontinuity in their early home environment which resulted in part to their inability to cope with the additive stressors encountered in the secondary education stage; hence the change from primary resilience to secondary non-resilience. This finding supported Horowitz (1987) Structural Behavioral Model of Development which noted that resilience can change at different developmental stages, and Werner's (1984) Balance Theory. This process of vulnerability was noted in children's aggressive and undisciplined behaviour, and their demonstration of a lack of appreciation for education which was reflected in their progressively poor academic performance, and, subsequently, to the attainment of poor CXC examination results. Conversely, educationally resilient children continued to value education and, with continued support at home, endeavoured to achieve educational success. As a consequence, one can conclude that despite hardship at home, some resilient children found the concern, love, affection, and support they needed to sustain their motivation

to achieve educationally. However, although this conclusion supported the hypothesis, it must be noted that in a few cases, educationally resilient children were able to function and achieve educational success despite living in unremittingly dysfunctional homes.

Hypothesis 3

High-risk children who became educationally resilient had parents who took an interest in their education.

At the primary education level parental interest in children's educational progress increased their chances of achieving educational success. The protective mechanisms operating within this factor were reflected in the effect direct parental interest had on their children's ability to cope with educational challenges. The majority of those who achieved educational success were encouraged by their parents; were assisted with assignments; were given time off to do their homework or to study; had parents who occasionally visited the school to discuss their educational progress with teachers and/or principal; had parents who gave incentives and took a keen interest in their test results and report books. It is possible that these parents saw education as a route out of poverty for their children.

There was a tendency for parental interest to wane after children have succeeded at the primary education stage. This was due to parents inability to assist children with their assignments at the secondary level due to their own inadequate educational background. Although a few children continued to receive parental support, taken as a whole at the secondary education level, parental interest was inadequate. This in part may have caused the level of academic competence of secondary non-resilient children to have been impaired. However, the secondary resilient children persevered and achieved educational success despite the absence of parental interest. Hence, the evidence supported the hypothesis only as far as the primary education stage was concerned. That is, parental interest in education had a greater influence on students' academic performance in the primary education stage, but was less evident during the

period of secondary education.

Hypothesis 4

Having a mentor in their lives had increased the chances of high-risk children becoming educationally resilient.

The majority of children who were primary resilient had a mentor in their lives during the period of primary education. In most cases the person acting as a mentor was the child's mother, but their role as mentor dwindled in the secondary education stage. However, in the secondary education stage teachers were the mentors of three of the cases and the child's mother in two. Nonetheless, all children received encouragement from their teachers which, of course, was different from mentoring.

Having a mentor meant that there were protective mechanisms in operation, which were reflected in the manner in which mentors instilled in children the value of education, encouraging them to have high aspirations, persuading them to work hard in order to achieve them, and by providing the support, stimulation and inspiration which they required in their endeavour. The presence of these protective elements and processes in the lives of high-risk children, in part, enabled them to cope with the adverse stressful circumstances which they encountered so as to subsequently achieve educational success.

As with parental interest, mentoring appeared to be especially important during the primary education phase. With respect to secondary education the association between a mentor and educational success was less in evidence. Therefore, having a mentor as a source of support and inspiration was more strongly associated with educational resilience in the late childhood/adolescence stages than towards the end of their school career.

Hypothesis 5

Children who were educationally resilient encountered mostly effective teachers in their primary and/or secondary education stage(s).

Both resilient and non-resilient children encountered mostly effective teachers. However, despite that fact there were many children who did not achieve educational success. This was probably an indication that teaching quality needed to be improved, or that effective teaching was not sufficient in itself. The need for the presence of other protective factors was essential. Therefore, depending entirely on teacher effectiveness to achieve educational success proved inadequate. Nonetheless, educationally resilient children had an opportunity to capitalise on the effectiveness of teachers in the quest to achieve educational success. In the absence of parental interest in their education, secondary resilient children were fortunate to encounter effective teachers who contributed significantly to their educational success. Teacher effectiveness was an especially important factor in the secondary education stage.

The protective mechanisms generated from this factor of teacher effectiveness were related to the quality of instruction and classroom management, teacher-student relationship, extra tuition given to students, and the system of awards used to promote academic achievement. These had a positive effect on resilient children and induced positive responses from them. However, for good teaching to be effective as a protective factor, other protective factors need to be operating such as internal locus of control, parental interest in the child's education, and having a mentor.

Hypothesis 6

High-risk children who became educationally resilient had an internal locus of control.

Children who were internally oriented had a tendency to be more successful in their education. This was reflected in their uncompromising attitude towards achieving

educational success, and their Standard Progressive Matrices scores. In keeping with the cognitive theory (Seedeldt, 1984), the resilient children, particularly the secondary resilient children, attributed their educational success to themselves, their inner desire and determination to succeed, their autonomy, and their ability to control their own environment. This was influenced by an inner drive (as enunciated by psychoanalytic theorists) for educational fulfilment and gratification. The assumption was that these resilient children with high internality apparently demonstrated better coping skills to meet the challenging situations which they encountered in their lives. Conversely, the evidence suggest that children who were external in orientation expressed the need to be pressured and encouraged by their parents and/or teachers to get on with work they knew they needed to do in order to achieve educational success. The fact that they did not achieve educational success and their poor accumulative record of academic performance demonstrated an inability to cope with the adverse situations in their lives. This inner will and drive, and desire to achieve against the odds seemed lacking. The evidence reflected a fatalistic view of education which emphasised a lack of commitment from non-resilient children.

Hypothesis 7

Intellectual ability increased the chances of high-risk children becoming educationally resilient.

Resilient children were, on the whole, more intelligent than those who were non-resilient. Part of this higher measured intelligence would have been genetic and part acquired through the same processes which enabled the child to become "resilient". But in order for intellectual ability to be effective as a protective factor, it must function in collaboration with other protective factors. Many non-resilient children were intellectually average, but due to the "imbalance" caused by the multiplicity of risk/stress factors in their lives, it was impossible for them to cope effectively (Rutter, 1979) or function adequately to achieve educational success.

Masten et al, (1988) and Werner and Smith (1982) are of the view that intelligence protect children against stress and is therefore a stress moderator. This suggests that the more resilient the children, the more capable they are of coping with stressful life events to subsequently achieve educational success. Conversely, the non-resilient children with low level of intelligence and facing several stressors, demonstrated a low level of academic achievement and subsequent educational failure.

Conclusions

The children in this study were considered at risk of educational failure due to the fact that they all lived in poor neighbourhoods. However, those considered most at risk were victims of insecure early attachment, parenting deficit, child and spousal abuse, social stigma, family discord, and neglect for reasons associated with parental alcoholism. A potential source of environmental influence on the children stemmed from family disruption and disharmonious family relationships. In keeping with the organisational developmental approach to the study of resilience (Egeland et al, 1993; Sroufe, 1991), these factors may serve as vulnerability variables. Consequently, high risk children who are subjected to such adversities are likely to experience behaviour maladaptation and developmental delays. However, it must be noted that these high risk children were exposed to these vulnerability factors in varying degrees, and these predicted quite significantly the variance in each child's functioning. Although the children were expected to manifest subsequent educational incompetencies as a consequence of their adverse circumstances, this was not inevitably the case for all such children. Thus, it can be argued, that experiences acquired by the children in the early developmental periods influenced the way in which they organised their later experiences.

The search for protective factors in the present study stemmed from finding that some of these high risk children were able to achieve educational success despite their harrowing experiences which were consequences of their exposure to extremely stressful circumstances. It was found that these children had different personal characteristics, relationships, background experiences and available resources than

those who succumbed to the stress of adverse circumstances and events. This finding found support in Waters and Sroufe's (1983) view that within an organisational development framework, resilience can be seen as the individual's ability to successfully use internal and external resources to avoid developmental maladaptations, and subsequently achieve educational competence. These personal and environmental factors that characterized this educational resilience were protective factors.

Faith in God (although not hypothesised) appeared to be a protective factor. The resilient children were actively involved in their religious community, and believed that in order to achieve educational success one had to have faith in prayer and the Almighty God. Resilience, they believe, is God's great gift to them as disadvantaged high risk children. This feeling of confidence or faith Werner (1984) believed can create a sense of expectancy in resilient children that all will be well and that it is not impossible to achieve your goal. Adherence to the church Pilling (1990) believes can provide sustenance for aspirations. This protective factor adds support to the recently introduced spirituality dimension of resilience which is being pioneered by the International Catholic Child Bureau (ICCB, 1994).

The identified protective factors which helped the high-risk children to escape the harsh realities of being poor and able to continue their education, had varying effects on their resilience. For example, a good parent-child relationship which derived from early attachment was found to reduce the risk associated with family discord. The security of a good mother-child relationship has been known to increase a child's self-esteem, a mechanism which probably exerted the protective effect. In addition, a strong relationship between mother and child from a very early age produced a sequence of desirable behaviour in an upward spiral. Conversely, early mother-child relationship characteristised by a sequence of negative interactions, produced, in the main, undesirable behaviour. This conclusion relates to Wertheim's (1978) transactional model of resilience in which the importance of a strong mother-child relationship is emphasised. However, in support of Bowlby's (1982) view, good quality parenting which correlated with early attachment in this study, was another

factor which generated a protective function among resilient children. On a developmental basis, Masten et al (1990) believe that this protection function may positively influence later behavioural adaptation.

With respect to intellectual ability, there is pleasure in accomplishment at school. A child who performs well will gain positive experiences which in turn will induce or reinforce feelings of self-esteem, self-worth, and self-efficacy. Most resilient children were of average or above average intelligence. This dispositional attribute was the strongest single predictor of resilience. It is widely studied in resilience research, and has consistently shown evidence of genetic influences across studies (Luthar & Zigler, 1991; Rende & Plomin, 1993). From a genetic theoretical perspective, intellectual ability is considered as a potential protective factor with heritable influences, likely to promote resilience in the face of adverse circumstances. However, intelligence has to be nurtured in a socially supportive environment (home and school) if the individual child is to realise its protective effects. This can be successfully achieved by keeping in focus the theory of genotype-environment effects.

Most resilient children had an internal locus of control. It was less important to be self-motivated at the early stages of education, but it became increasingly important at the secondary education stage. However, internal locus of control has been identified in the resilience literature as an individual dispositional attribute with protective functions (Grossman et al, 1992; Luthar, 1991). Thus, this potential protective factor may have increased the chances of high risk children becoming educationally resilient, particularly at the secondary education stage.

Although all children were of low socio-economic status, there were some who came from slightly better off homes than others in terms of quality of life. This shows that there are various levels of poverty, with those who live under the worst socio-economic conditions being most at risk of educational failure. Nevertheless, despite the poor home conditions, resilient children were more likely to find love, attention and support there. A less crowded home (in the case of primary resilience), having educational books in the home, and occupational status of parents (in the case of

secondary resilience) were associated with increased probability of a child being resilient. The willingness of parents to spend their limited resources to provide the home with educational books represents an attitudinal stand, and offers a much stronger indication to children of the high value they place on education.

The potentially protective factors of mentoring and maternal interest in education also contributed to educational resilience. It is noteworthy that 40% of families were single parent families, but where the nuclear family existed many fathers did not take a keen interest in their children's upbringing and educational progress, but rather left the role of child-rearing almost entirely to the mothers. This family division of labour has existed from colonial times.

The concepts of risk and risk factors, stress and stress factors, and protective factors proved to be indispensable concepts in this research. They have distinct implications for vulnerability and resilience, and provided the context from which educational resilience and educational failure were studied. The risk and protective factors were familial, environmental and/or personal and their interaction effects helped to determine the stress level and coping capacity of each individual child.

It was found that resilience or vulnerability cannot be considered a fixed attribute of the individual child. This is in keeping with Horowitz's (1987) structural behavioural model of development and Werner's (1993) balance theory which emphasise that resilience or vulnerability can change at different developmental periods in the presence of adversities. As circumstances change, the risk situation also change. Increased stress and adversity in adolescence led to behaviour maladaptation and subsequent educational failure even though all was well in infancy and early childhood, and vice versa.

The presence of a significant other or mentor in the life of a high risk child, may be considered as a potential protective factor likely to promote educational resilience. This factor, along with effective teachers, formed part of an external support system in the social environment which helped to reinforce the coping capacity of high risk

children, and contributed to their resilience.

Limitations of the Study

The researcher recognises the fact that this study has several limitations. It is cross-sectional in orientation, and although it provides useful insights into factors that moderate the effects of stress and promote educational resilience, it limits the advantages which could have been obtained from a longitudinal design adopted in other major studies of resilience. The researcher was constrained in her inability to follow the subjects of this research throughout the developmental stages, in order to study in-depth the protective and vulnerability factors and the mechanisms involved in influencing their educational achievement, and to comprehensively test the stipulated hypotheses. Ideally, a study aimed at identification of protective factors would require an early assessment of the high-risk children and their circumstances, and follow them longitudinally to observe changes in resource and protective factors, and level of functioning. These limitations however, placed constraints on potential generalisations and applicability of findings. Consequently, conclusions drawn from findings of the evidence presented in this study are tentative, and may only be applicable to the immediate sample population within the particular St. Lucian context; although references may be made to other Commonwealth Caribbean Countries.

However, although a longitudinal study may theoretically be the only way to study resilience, it would require a very large initial sample in order to be sure of sufficient numbers of resilient children, and at least fifteen years duration. Such a study is not feasible in the St. Lucia context. To begin with, it will not be possible to work with a large sample without knowing in advance which ones will be resilient. Also, funding such a big project in a small island for such a long period of time will be a problem. The government of St. Lucia does not allocate funds for such research projects.

The main source of qualitative data was obtained from in-depth interviews which provided information on early childhood retrospectively. The researcher recognises the problems associated with retrospective data. Minuchin (1988) highlights one of them by arguing that recall of the past is essentially a current construction, and therefore cannot be used to indicate with certainty a distinct cause-effect relation between past and present. This view was also elaborated by Radke-Yarrow et al (1988).

Whenever retrospective data are used as a key to the past, two important issues arise. Firstly, the question of potential reliability is of great concern because there are a number of affective and cognitive processes involved in describing the self and especially in descriptions of the past (Meyer, 1988). Secondly, and more importantly, the findings can easily be misinterpreted because the evidence may suggest that all children with certain characteristics and behaviour patterns, previously experienced specifically identified stressors. Thus, for these reasons it would have been more appropriate to use prospective studies. Prospective studies are also vital in establishing whether children who appear resilient at one stage of their life will continue to do well not only in terms of achieving educational success, but also on other aspects of adaptation as well.

On the positive side however, relationships are usually extended in time, and what transpires today may be influenced by what transpired previously. Consequently, important insights may be derived from retrospective material which represents the past experiences of concerned individuals, as was the case in this study. Besides, getting young people to reflect on their past in the light of their present situation may provide better insights into the processes which occurred than if I had been able to collect information at the early stage to correlate with subsequent outcomes. Such early information might exclude the very thing which caused the child to be resilient.

The four case studies presented in Chapter IX as a follow-up to the qualitative analysis, deviated from the traditional ethnographic, participant observation type case study approach. Rather, the researcher used both the quantitative and qualitative data

for each child to present case studies which exemplified each of the four resilient groups. Ideally, a more in-depth developmental study of the four cases might have provided more insights. However, the findings can stimulate the undertaking of further research in the lives of non-resilient children, and can play an important role in helping schools to intervene in their lives in an endeavour to modify their stressful situations.

With the exception of two cases where intergenerational continuity was identified with respect to child abuse and psychosis, this study was unable to investigate the family history of children's parents. This might have assisted in determining the reasons for the quality of attachment and parenting used particularly in the infant and early childhood stages.

Another limitation is that not all variables that might be relevant to the issues addressed could be included. Variables such as such as temperament, humour, special talents, social competence, and positive self concept, for instance, have been speculated as important (Conrad & Hammen, 1993; Garmezy, 1987; Masten, 1982; Werner & Smith, 1982). Also, my analyses of external protective factors such as early attachment, teacher effectiveness, having a mentor and parental interest in education were based on limited data from the in-depth interviews. Undoubtedly, independent verification and more extensive assessment of these protective factors would be useful.

The researcher had advance knowledge of which children were resilient and who were not. This prior knowledge might have influenced the conduct of the interviews. However, I tried to be as objective as possible, and gave children no indication that I admire their achievement or showed sympathy for those who were educationally unsuccessful. In addition, an attempt was made to conduct all the interviews in a similar manner to overcome bias, but following the same procedure was not always possible.

Implications

What then are the implications of this study? First and foremost, the findings in the present study may fit into a framework of various complementary models of development. The perspectives the researcher found most useful in interpreting the data, and which the findings lend some support to are the structural-behavioural model of development of Horowitz (1987), Werner's (1984) balance theory, the organisational developmental perspective of Egeland et al, (1993), and the transactional model suggested by Wertheim (1978) and Sameroff and Chandler (1975).

The resilience model adopted in this study focusing on the processes of adaptation and educational achievement in the context of adversity, has clear implications for prevention and intervention. While it is important to identify protective factors that foster educational resilience, it is imperative that the processes that contribute to this outcome in situations that more typically result in educational failure be examined. It will enable researchers to address the questions of "Why" and "how" some individuals are able to achieve competence despite the overwhelming odds. Understanding the processes is crucial to the development of effective preventive and intervention strategies (Rutter, 1990), in the hope of enhancing the chances of educational success in high-risk children and youths.

The findings support the view held by Clarke and Clarke (1976) that the whole of development is crucially important, and not just the infancy-early childhood developmental stages. There was indication that vulnerability factors may influence children irrespective of their stage of development. The negative effects of stressors at one stage may have consequences for subsequent developmental stages unless there is discontinuity. It is hoped that research will continue to identify and analyse the needs of individual children, and devise strategies for intervention in an endeavour to offset adverse conditions, satisfy children's needs, and reduce pathology in their environment.

The findings attest to children's self-righting tendencies. Many disadvantaged children successfully overcame the stressful circumstances which pressed them toward deviation and educational failure, and they instead achieved competence. The findings provide preliminary support to the cumulative stress hypothesis, which asserts that deviation from adaptational behaviour emerges as a consequence of a multiplicity of risk factors that combine to hinder normal development (Rutter, 1979; Sameroff & Chandler, 1975; Werner & Smith, 1982).

The research did not only focus on the negative influences of various adverse conditions on children's ability to achieve educational success, but adequately demonstrated the usefulness of the protective-factor concept in enhancing the chances of educational resilience. The study provides support for the usefulness of the Standard Progressive Matrices and Nowicki-Strikland Locus of Control scale as good methods of determining children's level of intellectual ability and the extent to which they are internal or external in orientation.

The findings contribute to an understanding of educational resilience. This suggests that high-risk children who are highly stressed but have the capacity to overcome the adverse stressful circumstances are those who have close supportive relationships with primary caregivers in the formative years, have parents who are interested in their education, who are intelligent and have developed an internal locus of control orientation, encountered mostly effective teachers, and who lived in functional homes. The findings have implications for prevention/intervention in that high-risk and highly stressed children may benefit significantly from the strengthening of the social support systems in their care-giving environment or the modification of their generalised expectancies of control to an internal orientation (O'Grady & Mertz, 1987).

Above all, the findings highlight the importance of familial and environmental factors in the process of achieving educational resilience. They provide additional insights into the emerging field of developmental psychopathology, an approach that emphasises the correlative interplay between normal developmental theory and findings derived from studies of high-risk population (Cicchetti & Toth, 1992); and

are relevant for the formulation of a developmental theory of educational resilience. They also indicate the importance of various protective factors as potential moderators of stress.

Guidelines and Strategies for Prevention and Intervention

In designing the guidelines and strategies for prevention and intervention, due consideration was given to St. Lucia's limited resources (human, financial, material). There are no facilities in place to assist troubled high-risk children and parents (families) in distress. Therefore, a gradual, practical and realistic programme must be initiated using not only the troubled disadvantaged children, but also other persons whose responsibility it is to work with them (e.g. parents, teachers, family life educators, counsellors, social workers, and nurses).

Immediate Strategies

1. The school must accept some of the responsibility for the poor academic performance of its students. It is the institution after the family where most children find for the first time, social and personal definition and meaning (Berkovitz, 1980). Therefore the educational practices at all levels of the school system need to be examined by Ministry of Education officials, for both positive and negative influences, teacher effectiveness, ability of teachers to challenge students' abilities, appropriateness of school goals, preparation for adulthood, provision for community activities as part of school curriculum, and whether the education received is in keeping with the real world needs and current social changes. The rationale for this examination is to help all children achieve their educational goal. Therefore, all schools should ensure that their educational practices and programmes: (a) are designed to meet the needs of all children irrespective of their SES; (b) provide an opportunity for demotivated students to be reunited in a positive learning environment; and (c)

effectively provide adequate general education and provide for children who need special training that is sustainable and appropriate to the needs of the country, and which will enable them to enter into the world of work.

2. The present school curriculum is restricted in its provision for appropriately contributing to the overall development of individual children. Therefore, Principals can supplement the curriculum by taking the initiative to introduce additional socially and practically oriented programmes, and making use of available human resources in the community in the implementation process.

3. The school curriculum needs to be revised to show that personal and social development are just as important as certified skills. The Curriculum Development Unit, through their field officers, may continue to monitor curriculum implementation with the view to making changes appropriate to the overall development of the child, thus making him/her competent to face the world of work.

4. The findings of this study revealed that the home environment of most high-risk children is not conducive for learning and home-study. With respect to homework, therefore, the school can assist such disadvantaged children by running after school clubs (under teacher supervision) specifically responsible for helping those who need help in the different subject areas. These clubs should be organised by the children themselves, giving them ownership of their own learning. Also to help them to develop their own curriculum, but one based on the school curriculum that they are exposed to.

5. The transition from the smaller primary schools to the larger secondary schools gives the "*maturing teenager objective validation of maturation and accomplishment, as well as a new adaptive challenge*" (Berkovitz,

1980: 64). However the poor, disadvantaged children usually experience *"a troubling, disruption of social and intrapsychic stability"* (Berkovitz, 1980: 64). It is not presumptuous to assume that when early adolescents are enduring acute internal upheaval, it is imperative that they remain in a stable social environment (Miller, 1970; cited in Sugar, 1980)). In St. Lucia, the transition from primary to secondary education occurs at the age of about twelve to thirteen years (Stds 4 and 5 or Grades 7 and 8), at a time when most adolescents are experiencing maximum internal conflict. The school should therefore design an orientation programme using effective teachers, counsellors, professionals from the training/service centres, who can help children to reestablish stability in a new school environment. With the exception of teachers who are on staff, the other personnel should form part of the schools' support staff because of their ability to help both teachers and children by ameliorating some of the adverse problems with which vulnerable children are confronted.

6. *"Without trying to become therapists, teachers and schools can help children from families in distress by showing that they care about them"* (Jones, 1986). Teachers are frequently the first to identify stress in children (Jones, 1986), are frequently the most significant people in children's lives (Allen & Green, 1988), and are undeniably the most indispensable factor in education. The challenge, therefore, is for teachers to use the ethos of the school and their qualities and skills as teachers to create a safe learning environment to help make children feel at ease in the classroom. This can be achieved for example, by engaging children in conversations about the forms of responses and behaviour from their teachers and peers that facilitate or discourage their learning. The creation and maintenance of this "safety" environment will not only give support and help children develop, but will also help to alleviate stress, and facilitate coping and learning.

7. Teachers' reactions to children's problems, the quality of teaching and teaching time are key determinants of students' educational achievement. Thus, teachers can create fora whereby disadvantaged children can be allowed to contribute their ideas and feelings. In this way, teachers may be in a position to help children recognise and find ways of coping with their stress, and consequently promote their chance of educational success.

8. Teachers can also make a major contribution to the resilience of disadvantaged children by encouraging them to develop a special interest in a particular subject, hobby or activity and give them tasks that confer importance/status and of value and also serve as a source of gratification and self-esteem.

9. To enable high-risk children to establish a good relationship with their teachers, particularly at the primary and lower secondary level, and to give teachers an opportunity to get to know and understand them and their home circumstances, the most effective teachers should stay with them for at least two to three years. Also, the timetable should be flexible to allow them to teach longer periods in an endeavour to sustain prolonged teacher-student relationship, and to create opportunities for more learning to take place. This will also give teachers an opportunity to take a realistic approach in dealing with children's stress; an approach that can build trust and strengthen the children's coping capacities. Positive experiences in the classroom can mitigate stress associated with children's home and familial environment (Rutter, cited in Werner, 1984). To accomplish this teachers can set standards, give incentives, praise, provide effective feedback, be a role model of exemplary behaviour, assign positions of trust and responsibility to children, and *"provide these children with order in a world gone mad"* (Jones, 1986).

10. Parents play a critical role in whether or not their children achieve educational resilience. They are the first educators of their children and therefore should make the first impression on them. Consequently, they must serve as positive role models worthy of emulation by their children. It is necessary that they (a) demonstrate their support by showing interest in the children's school work; (b) get involved in school activities; (c) exert their influence on the PTA's and School Boards to help enhance the quality of teachers who perform in loco parentis in the schools; (d) inculcate good values in the home; and (e) assist children to make the appropriate choices in their subject selection and career. The spiritual needs of children should not be neglected, so parents should enhance their spiritual development through the medium of family prayers.

11. It is important that all parents attend PTA meetings. However, the parents' of most disadvantaged children do not always attend. The school can instill in children the importance of all parents' contributions, and can hold meetings for smaller groups instead of having large gatherings that may be very daunting to some.

12. The PTA's need to reconsider their aims and objectives, assess parents needs, and help them to cope with their stressful situations at home. The PTA can teach parenting skills, assist parents in the areas of family life, child development and psychology. Parents may also be taught to identify and fulfil the needs and wants of their children, and to appreciate the value of education. The PTA's can also introduce parents to techniques which will help to build children's self-esteem and self-worth. They should work collaboratively with the Ministry of Education in setting up more adult literacy classes. Illiteracy was one of the main reasons cited for parents disinterest in their children's education.

Long-Term Strategies

1. To boost especially the achievement of those children who are considered to be at high risk of educational failure, it is imperative that the improvement of teacher quality input is viewed as one of the main qualitative ingredients in the attempt to arrest the expansion of this vulnerable group. More than 50% of St. Lucia's population are under the age of fifteen years and according to the World Bank report (1980), they will be at the forefront of social development efforts over the next three to four decades. Their socio-economic efficacy will therefore be determined by the quality of education they receive. Hence, to meet this challenge on a sustainable basis, the Division of Teacher Education and Educational Administration (DTEEA) at the SALCC need to promote greater effectiveness and efficiency in its programme of Teacher Education (World Bank, 1994). The DTEEA also need to include in its curriculum a special programme designed to meet the professional development needs of secondary school teachers. In other words, St. Lucia must upgrade and enhance its teacher training capability and capacity in order to cope with the challenges imposed by society.

2. At present there are no counsellors attached to primary schools in St. Lucia, and only one secondary school (the largest on the island) has two counsellors on staff. Judging from the important role that counsellors play in helping high-risk children cope with the adverse stressful circumstances which confront them, the Ministry of Education should train interested staff members and gradually appoint them as full time counsellors attached to schools located in particular zones or school districts. Their programme should include not only individual counselling, but "group" counselling as well through regular teaching sessions. The importance of the family, relationships, self-development, nutrition, school work, personal hygiene, hobbies and

special interests, consequences of alcohol and drug abuse, social problem-solving skills, should form part of a Guidance and Counselling curriculum.

3. In view of the fact that most educationally resilient children attributed, in part, their success to their faith in God, there seems to be a renewed need to revitalize religious education at all levels of the school system. This can be done by integrating religious education within the school curriculum, through instruction, religious clubs, study groups, prayer sessions, and making available religious literature.

4. The Ministry of Education, Culture & Labour has undertaken the task of providing a supplementary feeding programme for all children between the ages of 5 - 7 years enrolled in the lower section of the primary school. As a consequence of this study's findings, this programme should be extended to the upper primary and lower secondary to increase the nutritional intake of children in that age group.

5. Mothers, due to their culturally determined role as primary caregivers, appear to be the key figures in the attachment process, and are therefore crucial in any intervention programme aimed at enhancing child security or its subsequent developmental impact (Nezworski et al, 1988). Good quality parenting facilitates early attachment. Thus, in St. Lucia where pre-natal and post-natal clinics are held at the Health Centres, it is a good opportunity for early child educators, nurses, family practitioners and family life educators to reinforce the work of the PTA's by training prospective mothers and mothers in the effects of secure early attachment and insecure attachment, proper child-rearing practices, and relationship functioning. They can help provide emotional support to mothers by setting up social support systems, provide education to promote the accuracy of parental interpretation of

infant and child signals, and help to facilitate a change in parents' self-esteem.

6. Every year over 4,500 primary and secondary children leave the school system. With limited job opportunities, it means that most of these children are just drifting with nothing constructive to do. This constitutes a significant wastage of human resources. Some 50% of them become parents before the age of twenty, and perpetuates the process of intergenerational continuity continues. Thus, to maintain and improve the standard of living in St. Lucia, government need to tackle the unemployment problem and through its relevant Ministries, devise and execute in the shortest possible time, an appropriate and comprehensive system of human resource development. It is well known that in times of high unemployment, the incidence of alcoholism, child abuse, and spousal abuse increase, as was indicated in this study.

7. St. Lucia lacks child psychologists, child psychiatrist, trained professionals and researchers who are needed to work with high-risk children. Therefore, government may begin by setting up service/training centres, get a few persons qualified in child clinical work, who in turn can train non-clinicians to work in preventing childhood disorders and/or improve the development of those children who are experiencing high stress and are unable to cope. The key components of training may include (a) normal and life span development, adult development, behaviour problems, social and emotional issues; (b) standardised assessment procedures which include the administration of standardised tests of ability and achievement as well as standardised behavioural assessment. Trainees must have a knowledge of how the content of assessment is related to various aspects of development, and also whose general predictive powers. This will help to identify ways in which a particular child

differs from the normative reference groups. To achieve "7" some candidates should be trained in research techniques, research designs and methodology, collecting data, statistics, and drawing conclusions from data. The products of research could prove to be invaluable in both the prevention and intervention stages. Therefore, it is imperative for researchers to identify protective/vulnerability factors, search for cause and effect relationships, design techniques for prevention and/or intervention, evaluate the outcomes of the techniques employed, and use follow-up procedures. (d) An understanding of the behaviour maladaptation and abnormalities that are typical of children reared in poverty and are at high risk of educational failure should be included. (e) Social skill techniques as well as techniques for assisting parents adopt appropriate behaviour toward their children may be a component of the training programme.

8. The preventive techniques used should seek to eliminate the general social ills found in children's immediate environment in order to reduce the risk of psychopathology and subsequent educational failure. Hence researchers need firm evidence of cause-effect relations. It is imperative also for researchers to conduct longitudinal studies of children who are at high risk of educational failure in order to gain a step by step progression of the effects of stressors over various developmental periods in order to devise effective prevention/intervention strategies. The process may include the effects of secure/insecure early attachment; an evaluation of the physical and emotional health which children bring to adolescence; the presence or absence of pathology within the family; the quality of parenting and interpersonal relationships; and the pressures emanating from the wider community and educational institutions.

9. For effective coordination and evaluation of the programme, the main training and operations centre may be set up in a central location with

sub-centres in the three towns to begin with, and these can be extended later to the villages for accessibility. A team of trained personnel will be needed to manage the centres. These training centres should liaise constantly with the social workers under the aegis of the Ministry Community Development, Youth and Social Affairs, juvenile court, and schools in an endeavour to help the children who are their joint responsibility.

10. Family therapy can be very effective particularly when a difficult child comes from a family of low SES. It is necessary in situations where the family system clearly contributes to the child's behavioural problems, stifles intellectual development, and blocks the child's efforts to improve. Therefore, family therapy may be useful as a component in the service programme described above.

11. In hard-core poverty neighbourhoods the government and private sector organisations can work cooperatively in allocating some of their resources to set up a wide range of services geared to developing the coping capacity of the youth to deal more effectively with the stressors and negative influences of their environment. These services can help to provide the needs of PNR and SNR children and also help them to recover from their ordeal. The services could include job training, career objectives and career placement, counselling, recreational and cultural activities, educational programmes, and leadership training.

12 Patios has been known to negatively influence educational achievement. Therefore, recent suggestions for the development of patois as a formal language should be considered.

13 Noting the insignificant role of men in child rearing the Ministry of Education, Culture and Labour should consider ways and means to attract more male teachers at all levels of the school system.

Future Directions for Research

Resilience research has provided important but limited insights into the variation in children's adaptive behaviour. A fairly congruent picture of educational resilience has emerged from this study. It is the task of future researchers to further investigate educational resilience using research questions that shift from the descriptive "what" questions to "how" questions that underpins the risk and protective processes which influence educational success. Also, because resilience is a non-static and dynamic developmental construct, it will be necessary to follow and monitor the adaptation of educationally resilient and non-resilient children in this study over the coming years, before I can conclude with complete confidence and certainty that they are indeed genuinely resilient, or that the non-resilient are not in the end resilient. I am also optimistic that continued study of protective processes underlying competence and ongoing educational resilience, and mechanisms contributing to a decline in educational achievement in high-risk samples will lead to a better understanding of normal and pathological development, and will have direct relevance for the upgrading and/or developing of prevention and intervention programmes.

A replication of this study in other Commonwealth Caribbean countries and in communities in the wider world using cross-cultural studies, would help bring us closer in developing a theory of educational resilience. There is need for a broader perspective, one which places educational success in a wider socio-cultural context.

There is also a need to closely examine various patterns of resilience in order to understand the effects of adverse life events on different aspects of development, and to understand how early development relates to behavioural adaptation in subsequent developmental stages. The search for potential resources in the environment that can help sustain and protect high-risk adolescents and young adults from educational failure must and will continue. Once identified, the research task has only just begun; for what Rutter (1987) believes is ultimately essential, is the search for the underlying mechanisms and/or processes that actuate protection and help to explain the attributes of stress resistance.

However, the pivotal role now for developmental psychopathologists is to understand the nature of risk, stress, vulnerability, and protective factors as they evolve and become intertwined in development to produce differences in the quality of behavioural adaptation in individuals. To study children's behaviour under adverse circumstances, to systematically identify what makes high-risk children cope well with stress are of unquestionable value, and may provide unique opportunities to comprehend the processes of adaptation (Masten, 1989).

In sum, the search for understanding the roots of resilience continues. It is a challenge for both present and future researchers. Successful completion of this search will have implications for a theory of resilience, provisions for prevention and/or intervention, and policy making.

Final Note

The complexity of research on resilience must be appreciated. While children benefit from the positive effects of protective factors, the specific factors that will be of use in any case are dependent on the particular context of the individual's life. I remain convinced that the study of the positive aspects of adaptation notably protective factors and resilience, is essential in building upon the existing knowledge base to which all future researchers can contribute. This is necessary if we are to develop a theory of resilience, devise and promote prevention and intervention programmes in an endeavour to treat behaviour maladaptation, and help high-risk children achieve educational success. Thus, knowledge acquired from the present study, when replicated, may inform the study of resilience as well as contribute knowledge about the risk/vulnerability and protective factors which naturally occur and are relevant for the prevention of educational failure and for optimizing intervention programmes. As we applaud the courage and tenacity of some high-risk children, let us not do them the disservice of failing to observe the difficulties that frequently coexist with their high level of functioning.

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List of Abbreviations

CEE	Common Entrance Examination
CSE	Certificate of Secondary Education
CXC	Caribbean Council Examination
GCE	General Certificate of Education
LOC	Locus of Control
PNR	Primary Non-Resilient
PNR/F	Primary Non-Resilient Female
PNR/M	Primary Non-Resilient Male
PR	Primary Resilient
PR/F	Primary Resilient Female
PR/M	Primary Resilient Male
PTA	Parent Teachers Association
SBA	School Based Assessment
SES	Socio-economic Status
SI	Social Index
SNR	Secondary Non-Resilient
SNR/F	Secondary Non-Resilient female
SNR/M	Secondary Non-Resilient Male
SPM	Standard Progressive Matrices
SR	Secondary Resilient
SR/F	Secondary Resilient Female
SR/M	Secondary Resilient Male

APPENDICES

Appendix 1.1

Caribbean Examinations Council*
Secondary Education Certificate
June, 1979

This is to certify that

(Name) _____

obtained the results shown in the following subjects

Mathematics	General V	: Computation C, Reasoning N/A, Application N/A
English A	General II	: Understanding A, Expression B.
History	Basic IV	: Factual Knowledge C, Historical Inference C, Contextual Grasp C.
Geography	Basic I	: Special Concepts A, Social Geography B, Physical Geography A.
Integrated Science (Two Awards)†	General III	: Energy and Matter C, Environmental C, Environmental Skills B.

Five Subjects

Registration Number: 79 01 296 375
Date of Birth: 23 September 1963

(signed) Registrar (signed) Chairman

*The Council was established by agreement of 15 Commonwealth Caribbean Governments in 1972 and is recognized by the participating governments as the regional examining body for the area.

†Two or more awards are recognized in certain integrated examinations which are equivalent to separate exams in two or more subjects or which require a total period of preparation in excess of that for two or more subjects.

Appendix 1.2

Crosstabulation: Region by Literacy Levels

Region	Illiterate	Functionally Illiterate	Literate	Row Total
Gros Islet	22.2	17.2	60.6	3678
Babonneau	25.7	21.9	52.4	4189
Dennery	39.1	22.1	38.8	4103
Micoud	26.5	19.5	54.0	5852
Vieux Fort/Laborie	27.2	19.4	53.4	8414
Soufriere/Choiseul	31.9	17.8	50.3	6037
AnseLaRaye/Canaries	38.1	24.1	37.7	3076
Castries	21.3	15.7	62.9	14264

A total of 49,600 adults were covered by the census.

Source: Adult Literacy Survey 1991. Ministry of Education, Culture and Labour.

Appendix 2

9 May 1994

Dr. Michael Louis
Chief Education Officer
Min. of Education, Culture & Labour
Castries

Dear Sir

For the past eight months I have been pursuing a PhD in Education at the University of Bristol; the provisional topic is "Educationally Resilient Children in St. Lucia".

Resilience is a concept borrowed from Developmental Psychology to describe children at high risk of educational failure, due to adverse social circumstances yet achieve educational success.

The main objective of the study is to identify and examine the factors which increase the chances of educational failure in the lives of children who come from deprived areas and disadvantaged backgrounds, and who were not able to gain admission into a secondary school in 1993. Also, to suggest intervention strategies to assist those who are most vulnerable and at high risk of educational failure.

To achieve this, I need to work in all fourteen secondary schools, the Community College, the primary schools on the attached list, and the statistics department at the Ministry of Education. Specifically, questionnaires will be administered to the students who form the main sample to collect socio-demographic information. The Nowicki-Strickland Locus of Control scale and the Standard Progressive Matrices will also be completed by them. From the main sample students will be selected to form four sub-samples. Interviews will be conducted with the subjects in these samples to test the variables: home and school environment, mentor, early attachment, internal locus of control and parental interest in child's education.

I write therefore, to seek your permission to use the schools mentioned above to carry out the research. I have enclosed copies of the questionnaire, locus of control scale and interview schedules for your approval.

I will be returning to St. Lucia on June 1st, 1994 and will contact you thereafter for your response. Should you need more information on the nature of the research, I will be most willing to oblige.

Thanks in anticipation, and best wishes.

Yours sincerely,

Morella Joseph (Miss)

Appendix 3

9 May 1994

Mr. Matthew Hutchinson
Principal
Pierrot Combined School

Dear Sir

For the past eight months I have been pursuing a PhD in Education at the University of Bristol; the provisional topic is "Educationally Resilient Children in St. Lucia".

Resilience is a concept borrowed from Developmental Psychology to describe children at high risk of educational failure, due to adverse social circumstances yet achieve educational success.

The main objective of the study is to identify and examine the factors which increase the chances of educational failure in the lives of children who come from deprived areas and disadvantaged backgrounds, and who were not able to gain admission into a secondary school in 1993. Also, to suggest intervention strategies to assist those who are most vulnerable and at high risk of educational failure.

To achieve this, I need to work with a small group of Standard 5 students from your school. Specifically, from a group of five students to whom questionnaires will be administered to collect socio-demographic information, only two will be selected for the sample. Interviews will be conducted with the subjects in the sample to test the variables: home and school environment, mentor, attachment,internal locus of control and parental interest in child's education.

I write therefore, to seek your permission to use the Vieux Fort Senior Primary School to carry out the research. I have enclosed copies of the questionnaire, locus of control scale and interview schedule for your approval.

I will be returning to St. Lucia on June 1st, 1994 and will contact you thereafter for your response. Should you need more information on the nature of the research, I will be most willing to oblige.

Thanks in anticipation, and best wishes.

Yours sincerely,

Morella Joseph (Miss)

Appendix 4

Morne Beausejour
Vieux Fort

June 2, 1994

.....
.....
.....

Dear .....,

For the past eight months I have been pursuing a Research Degree in Education at the University of Bristol, England.

The main objective of the study is to identify and examine the factors that increase the chances of educational success and educational failure in the lives of children who come from deprived areas and disadvantaged backgrounds in St. Lucia. Also to suggest prevention and intervention strategies to assist those who are most vulnerable and at high risk of educational failure.

To achieve this, I need to work with groups of children from the primary and secondary schools, and from the Community College. Each child will be given a questionnaire about the home and family, and parents' education and occupation to complete; along with an attitude scale and a test of intellectual ability. The children selected from these groups will be interviewed.

I write therefore, to seek your permission to select your son/daughter..... to be a member of my research sample. If you should agree, please complete the information below and return it to me in the stamped self-addressed envelope or call me at telephone number 4549014. Information received will be treated in the strictest confidence.

Thanks in anticipation of your kind co-operation.

Yours sincerely,

.....
Morella Joseph (Miss)

.....

I, ... thereby grant/do not grant permission formy son/daughter..... to be a member of your research sample.

Signed .....

Appendix 5

Morne Beausejour
Vieux Fort

June 6, 1994.

Dear .....

I am in the process of collecting data for a research project. I would be very grateful if you could provide me with information on the home and social environment and your parents, to help me ascertain their relationship with your school performance.

Please find enclosed a Questionnaire. I would be very grateful if you could complete and return it to me in the enclosed stamped and self-addressed envelope as soon as possible. Be assured that your information will be treated in the strictest confidence.

Thanks in anticipation of your kind co-operation.

Yours sincerely,

.....
Morella Joseph (Miss).

Appendix 6

Morne Beausejour
Vieux Fort

June 12, 1994.

Dear .....

With reference to letter dated ....., I wish to inform you that you have been selected by me to be a member of my research sample. If you agree to participate, please complete the information below and return it to me in the stamped and self-addressed envelope or call me at telephone number 4549014.

To be a participant, you will be required to

1) complete one attitude scale of 40 questions

2) a test for intellectual ability

3) and be interviewed for a minimum of one and a half hours.

I would be very grateful if you could reply promptly.

Thanks in anticipation of your kind co-operation.

Yours sincerely,

.....
Morella Joseph (Miss)

.....

(1) I do not want /want to be a member of your research project.

(2) I therefore agree to meet with you to complete the scale and test on:

Date:.....

Time:.....

Place:.....

Please suggest an alternative date and time if the above (date and time) are inconvenient to you.

Date..... Time.....

Signed .....

Appendix 7

Sample of work sheet: 1

Name:	Date:
Date of birth:	Religion:
Present address:	Communities lived in:
Last address:	Parents' occupation: Mother: Father/stepfather:
Present school	Health:
School last attended:	Conduct:
Examination Results:	CEE & CXC
CEE Score:	Average:
CXC Subjects and grades:	Subject Grade 1 2 3 4 5 6 7 8 9 10

Appendix 8

Sample of work sheet: 2

Students who wrote the 1993 CEE and were not assigned to secondary schools

Name of School:.....

NAME	D.O B	ADDRESS	FATHER Occupation	MOTHER

Appendix 9

Sample of work sheet:3

Students who wrote the CEE and were assigned to Form 1 at the secondary schools.

Name of School.....

NAME	D.O.B.	ADDRESS	Occupation FATHER	MOTHER

Appendix 10

Sample of work sheet: 4

Students who did exceptionally well on the CXC examinations to gain admission at the Community College

Name of School:.....

NAME	D.O.B.	ADDRESS	Occupation FATHER	MOTHER

Appendix 11

INTERVIEW SCHEDULE

(For Form 1 resilient children at the Secondary Schools and Grade 8 non-resilient children at the Primary Schools)

I am interested in children and in finding out how they get along in school. I hope that talking to you will help me to better understand them. Is it O.K. with you if I use the tape recorder? You have my word that no one else will get to know what we have talked about. Not even your teachers.

Now I am going to take you on a very long journey, starting from the time you were born to the present.

ATTACHMENT

1. Lead Question: You must have heard your parents and other members of your family talk about when you were small. Tell me as much as you can remember about the first years of your life.

   i Who took care of you of you as an infant?
   ii What can you remember about that person?
   iii (If primary caregiver was not the mother): Why didn't your mother take care of you?

2. You must have been close to someone when you were very young. Can you remember who it was that you were close to and why you were close to that person?

   i How much time did the two of you spend together?
   ii What can you remember about the kinds of things that the two of you did together?
   iii Are you still close to that person? Why?
   iv How did you feel when you were in the company of this person?
   v (If person attached to was not a parent): Why didn't you become close to your mother/father?

FAMILY

3. Lead Question: I am interested in what went on and still goes on at your home and in your family. Now tell me all about your home and family.

   i How would you describe the way you and your mother got along when you were quite young?
   ii Describe the way the two of you get along now.
   iii How much time do you and your mother spend together?
   iv What do you do when you are together?
   v How much do you and your mother talk?
   vi What is your mother like?
   vii How like your mother are you?

4. Now let's talk about you and your father. Tell me about him.

   i How would you describe the way you and your father got along when you were a child?
   ii How well do the two of you get along now?
   iii How much time do the two of you spend together?
   iv What do the two of you do when you are together?
   v How much do you and your father talk?
   vi What do you talk about?
   vii What is your father like?
   viii How like your father are you?

5. What kind of encouragement and support do you get from your parents?

   i Do they show interest in your school work? If so, how?
   ii Do you find it hard to study and do your school work at home? How do you cope?
   iii What kinds of toys did you have as an infant/child/young adolescent?
   iv What would your parents like you to do when you leave this school?

6. What kinds of things do you do together as a family?

7. How would you describe the way your mother and father get along with each other?

   i How often do they quarrel or get into fights?
   ii What do they often quarrel or fight about?
   iii Who usually seems to start the quarrel/fight?
   iv How long do these quarrels/fights last?

8. How do you get along with the other members of your family?

   i How did you get along with your brothers and sisters before? (and other relatives living at home)
   ii How do you get along with them now?
   iii Do they encourage you in your school work? If so, how?
   iv How do they get along with each other?
   v How do your parents get along with them?

9. How did your parents try to make you a good person?

   i What did they stress as particularly important when you were growing up?
   ii What rules do you have in your family?
   iii Who makes them?
   iv What happens if you do not obey these rules?
   v How do you help your parents at home?

SELF

10. Lead Question: Now let us talk a little about yourself. How would you describe yourself?

    i How often have you become ill?
    ii What was the nature of your illness?
    iii Have you been hospitalized? When? Why?
    iv How do you feel now?

11. I am sure that there are some good things and some bad things too which you experienced as a child growing up. Tell me about them.

    i What were some of the good experiences you had as a child?
    ii What were some of the bad experiences you had as a child?
    iii How did you cope with them/
    iv What good experiences do you still have?
    v What bad experiences do you still have?
    vi How do you cope with them?

12. By now you may have given some thought to what you would like to do when you grow up. Can you tell me what it is that you most want to achieve in life? Why? How do you plan to achieve it?

    i What do think are some of your strong points?
    ii What are some of your weak points?

13. How do you try to change and develop yourself?

14. Did you ever have a problem and have to get help for it ? Tell me about it.

i What was the problem for which you sought help?
ii From whom did you get help?
iii What did you gain from that experience?
iv (If person was a counsellor): Over what period of time and how often did you see the counsellor?
v Was it alone or with your family?
vi Have you stopped? Why?
vii If you never got help, was there a time you thought you might need it?

15. What has helped you to become the kind of person that you are?

16. What activities in your life are of great importance to you?

17. Tell me about the area where you live. Do you like to live there? Why?

i Where would you prefer to live? Why?

MENTOR

Lead Question:

18. Now let us talk about the people that you like, and who seem to have a great deal to do with the way you are getting along. With whom do you spend most of your time? Why?

    i With whom do you enjoy playing / working /talking?
    ii How well do you get along with people?
    iii How well do they get along with you?

19. Is there anyone that you admire and wish to be like? Who?

    i What makes you admire that person and wish to be like him/her?

20. Is there anyone that you trust and tell your secrets to? Who?

    i What is it about that person which makes you trust him/her?

21. Whose ideas and opinions mean the most to you? Why?

    i Who would you like to seek advice from? Why?

22. Is there anyone who thinks that you are capable of doing very well? Who? In what way?

i Does this person urge you on? How?
ii Describe the way the two of you get along with each other.

23. What have you gained from that friendship?

i Do you intend to continue that friendship? Why?

SCHOOLS/EFFECTIVE TEACHING

24. Lead Question: Now let us concentrate on the time which you have spent at school. What can you remember about the first time that you went to school?

i How old were you when you first went to school?
ii Which school was it?
iii What can you remember about the time that you spent there?

25. After leaving the Pre-school you entered the Infant/Primary School. What was the change like for you?

i What can you remember about the classes you attended at :
(a)Infant stage
(b) Primary stage?
ii Describe a good day in anyone of these classes.
iii Describe a bad day in anyone of them.
iv Did you have mostly good days or mostly bad days when you were at school?
v How did you get along with your classmates?
vi Did you have rules in your class?
vii What happened if the rules were not obeyed?

26. Now tell me about the teachers who taught you in these classes.

i Was there anyone in particular that you liked or felt close to? Who? Why?
ii Did you dislike any of them? Why?
iii How did the teachers reward you for doing well in class?
iv Were you punished for not doing well? How?
v How did they help you with your work?
vi Do you think that the teachers liked some children more than others? How did you know?
vii What responsibilities were you given by the teachers?

27. How would you describe a good teacher?

28. How would you describe a bad teacher?

    i Did you have mostly good or mostly bad teachers?

29. Now when you got to Standard 4 (Grade 7) you had to write the Common Entrance examination (CEE) in order to go to the Secondary School. How did you prepare for that exam?

    i What do you think caused you to succeed/fail?
    ii Were you satisfied with the way you did in school?
    iii How satisfied are you with the education you received at the Infant/Primary school(s)?

30. How do you feel now that you are at the Secondary School? or having to remain at the primary school?

31. Is there anything else you feel is important to you that we haven't talked about?

Appendix 12

INTERVIEW SCHEDULE

(For Year 1 resilient children at the Community College, and those who graduated from Secondary Schools but did not do well enough to gain admission there)

I am interested in adolescents, and in finding out how they get along at home and at school. I hope that talking to you will help me to better understand them. (Is it O.K. with you if I use the tape recorder?) You have my word that whatever you say to me will be kept strictly confidential.

Now together we are going on a long journey, starting from the time you were born to the present.

ATTACHMENT

1. Lead Question: You must have heard your parents and other members of your family talk about when you were small. Tell me as much as you can remember about the first years of your life.

   i Who took care of you when you were an infant?
   ii What can you remember about her?
   iii (If primary caregiver was not the mother): Why didn't your mother take care of you?

2. You must have been close to someone when you were quite young. Can you remember who it was you were close to, and why you were close to that person?

   i How much time did the two of you spend together?
   ii What can you remember about the kind of relationship you had with this person?
   iii How did feel when you were in the company of this individual?
   iv Are you still attached to that individual? Why?
   v (If person attached to is not the parent): Why didn't you become attached to your mother/father?

3. What other attachments have you formed since your childhood? Tell me about them.

FAMILY

4. Lead Question: I am interested in what went on , and still goes on in your home and with your family. How would you describe your home and family?

5. How would you describe your relationship with your mother ?

i During your childhood?
ii At present?
iii How much time do the two of you spend together?
iv How much talking do the two of you do?
v What do you usually talk about?
vi What is your mother like?
vii How like your mother are you?

6. Now let's talk about your father. How would you describe your relationship with him?

i During your childhood?
ii At present?
iii How much time do the two of you spend together?
iv How much talking do the two of you do?
v What do you usually talk about?
vi What is your father like?
vii How like your father are you?

7. How much support and encouragement did you get from your parents?

i How did they show interest in your school work?
ii Describe their relationship with your teachers.
iii How difficult was it to study at home? How did you cope?
iv Tell me about the kinds of toys you had when you were an infant/child/early adolescent.
v What future plans do your parents have for you?

8. Do you do things together as a family? If yes, what kinds of things?

9. How would you describe your parents relationship with each other?
i How often do they get into arguments or fights?
ii What do they usually argue about?
iii Who usually seems to start the arguments?
iv How long do these arguments/fights last?
v What do you do during that time?

10. Now let us talk about your relationship with the other people in your home. How would you describe it?

i How did you get along with them when you were growing up?
ii How do you get along with them now?
iii What kind of support and encouragement do you get from them?
iv Do they help with your school work?
v How do they get along with each other?

11. How did your parents try to make you a good person?

i What did they stress as particularly important when you weregrowing up?
ii What rules do you have in your family?
iii Who makes them?
iv How are these rules enforced?
v What responsibilities do you have at home?

SELF

12. Lead Question: Now let us talk a little about yourself. How would you describe yourself?

i How often have you become ill?
ii What was the nature of your illness?
iii Have you ever been hospitalized? When? Why?
iv How do you think that your illness could have been avoided?
v How do you feel now?

13. I am sure that there were some good things and some bad things too which you experienced as a child growing up. Tell me about them.

i What were some of the good experiences you had as a child?
ii What were some of the bad experiences you had as a child?
iii How did you cope with them?
iv What good experiences do you still have?
v What bad experiences do you still have?
vi How do you cope with them?

14. I am almost certain that you have given some thought to what you would like to do when you graduate /or later in life. Can you tell me what it is that you most want to achieve in life? Why do you want to achieve it? How do you plan to achieve it?

15. How do you try to change and develop yourself?

16. What do you think are some of your strong points?

17. What do you think are some of your weak points?

18. Did you ever have a problem and have to get help for it? Tell me about it.

i What was the problem for which you sought help?
ii From whom did you get help?
iii What did you gain from that experience?
iv (If person was a counsellor): Over what period of time, and how often did you see the counsellor?
v Was it alone or with your family?
vi Have you stopped? Why?
vii If you never got help, was there a time you thought you might need it?

19. What activities in your life are of great importance to you?

20. What are the most important experiences and influences that have helped make you the kind of person that you are?

21. Are you employed now? Tell me something about the kind of work that you are doing.

i Why are you working?

22. Tell me about the community in which you live. Do you like to live there? Why?

i Where would you prefer to live? Why?

MENTOR

23 Lead Question: Now let's talk about the persons who may have influenced your life in some way, or seem to mean a great deal to you. Tell me, how do you spend your time when you are not at school?

i With whom do you spend most of your time? Why?
ii What kind of people do you enjoy spending time with? Why?
iii How well do you get along with people?
iv How well do they get along with you?

24. Is there anyone that you admire and wish to emulate? Who?

i What makes you admire that person ?
ii What is it about the person you would like to emulate?

25 Is there anyone that you trust and confide in? Who?

i What is it about that person which makes you trust him/her?

26 Whose ideas and opinions mean the most to you? Why?

i Who do you seek help and advice from?

27 Is there anyone particularly who has confidence in your ability to do well? Who?

i Does this person urge you on? How?
ii Describe your relationship.

28 What have you gained from that friendship?

i Do you intend to continue that friendship? Why?

SCHOOLS/EFFECTIVE TEACHING

29. Lead Question: Now let us concentrate on your school years. What can you remember about the first time that you went to school?

i How old were you when you first went to school?
ii Which school was it?
iii What can you remember about the time you spent there?

30. After leaving the Pre-school, you entered the Infant/Primary School. What was the change like for you?

i What can you remember about the classes you attended at:
(a) Infant stage?
(b) Primary stage?
ii Describe a good day in anyone of these classes.
iii Describe a bad day in anyone of them.
iv Did you have many more good days than bad days at this school? (Give reasons for your answer).
v How did you get along with your classmates?
vi Did you have rules in your class?
vii How were they enforced?

31. Now tell me about the teachers who taught you at the Infant/Primary School.

i Was there anyone in particular that you liked or felt very close to? Who? Why?
ii Did you dislike any of them? Why?
iii How were you rewarded for performing well in class?
iv Were you punished for not doing well? How?
v How did they help you with your work?
vi Did the teachers have favourite students in the class?
vii How did you know?
viii What responsibilities were you given by the teachers?

32. How would you describe a good teacher?

33. How would you describe a bad teacher?

i Did you have mostly good or mostly bad teachers?

34. Now when you got to Standard 4 (grade 7) you had to write the Common Entrance Examination in order to gain admission at the Secondary School. How did you prepare for that exam?

i To what do you attribute your success or failure?
ii Were you satisfied with the way you performed at school?
iii How satisfied are you with the education you received at the Infant/Primary School?

35. Now let us look back at your five years of Secondary education. Tell me about all you can about your secondary school years.

i Which secondary school did you attend?
ii Why did you choose that particular school?

36 In what form did you choose your subjects.

i Which subjects did you choose?
ii Why did you choose these subjects?

37. What can you remember about the classes you attended.

i What were your responsibilities?
ii Describe your relationship with your classmates.
iii Did you enjoy going to class? Why?
iv Were there class rules?
v How were they enforced?

38. What were your favourite subjects?

i What did you particularly like about those subjects?

39. What subjects did you dislike?

i What did you dislike particularly about those subjects?

40. Tell me what you can about the teachers who taught you. Describe your relationship with them.

i How were you rewarded by them for good performance?

41. You wrote your external exams (CXC) at the end of your fifth year. How did you prepare for it?

i To what do you attribute your success, or failure?
ii How important was it for you to do well on these exams?

42. How satisfied were you with the education you received at the Secondary School?

43. How do you feel now that you are at this Community College? or How did you feel when you realized that you would not get a place at the Community College? How do you feel about it now?

44. Is there anything else you feel is important to you that we have not talked about?

Appendix 13

QUESTIONNAIRE

Please answer all the questions by ticking in the correct boxes or writing in as required.

Full Name:_____

Sex:_____

Date of Birth: _____

Place of Birth:_____

Present Home Address: _____

_____

A. Home and Social Environment

A.1. What type of home do you live in?

Please tick the correct box.

wall house [ ]

wooden house [ ]

other [ ]

Please describe_____

A.2 Is your home owned or rented?

Owned	[ ]
Rented	[ ]
Being bought	[ ]
Other	[ ]

Please specify_____

A.3. How many of these amenities do you have in your home?

Please tick all that apply.

Bathroom with fixed bath or shower	[ ]
Indoor lavatory	[ ]
Outdoor lavatory	[ ]
Water supply in the house	[ ]
Garden or yard	[ ]
Kitchen	[ ]
Electricity	[ ]

A.4. How many rooms are there in your home? (Do not include kitchen, bathroom or toilet.)

Number of rooms_____

A.5. Do you share a bedroom with others?

No	[ ]
Yes	[ ]
With one other	[ ]
With two others	[ ]
With more than two	[ ]

A.6. Which of the following does your family have?

Please tick all that apply.

Refrigerator	[ ]
Washing machine	[ ]
Colour television	[ ]
Black and white television	[ ]
Stereo set	[ ]
Vehicle	[ ]
Telephone	[ ]
Gas stove	[ ]
Kerosene stove	[ ]
None of the above	[ ]

A.7. What language is used most of the time home?

English	[ ]
Patois	[ ]
Other language	[ ]

Please specify_____

A.8. Do you have books at home? (Do not include your school textbooks)

Please tick all that apply.

Storybooks	[ ]
Novels	[ ]
Magazines	[ ]
Comics	[ ]
Newspaper	[ ]
Encyclopedias	[ ]
Other	[ ]

Please specify_____

A.9. Which of these groups do your parents belong to?

	Mother	Father
Black	[ ]	[ ]
Indian	[ ]	[ ]
White	[ ]	[ ]

Other, please specify. _____ _____

B. Family Composition

B.1. A household consists of a group of people who all live at the same address. List below all the members of your household and their relationship to you beginning with your parents.

	Name	Relationship	Age	Sex
1				

2_____

3_____

4_____

5_____

6_____

7_____

8_____

9_____

10_____

11_____

12_____

B.2. What is the relationship to you of the person who acted as your mother?

Please tick the correct answer.

Natural mother [ ]

Stepmother [ ]

Foster mother [ ]

Grandmother [ ]

Elder sister [ ]

Other [ ]

Please specify_____

No mother figure [ ]

B.3. What is the relationship to you of the person who acted as your father?

Please tick the correct answer.

Natural father [ ]

Stepfather [ ]

Foster father [ ]

Grandfather [ ]

Elder brother [ ]

Other [ ]

Please specify_____

No father figure [ ]

C. Education and Occupation of Parents

C.1. What type of school did your parents attend?

Tick all that apply.

	Mother	**Father**
Infant	[ ]	[ ]
Primary	[ ]	[ ]
Secondary	[ ]	[ ]
College	[ ]	[ ]
University	[ ]	[ ]
Never attended school	[ ]	[ ]

C.2. What qualifications do your parents have?

Tick all that apply.

	Mother	Father
Std 6 School Leaving Certificate	[ ]	[ ]
G.C.E. Certificates	[ ]	[ ]
C.X.C. Certificates	[ ]	[ ]
Diploma	[ ]	[ ]
Degree	[ ]	[ ]
Other qualifications, please specify	[ ]	[ ]
No qualifications	[ ]	[ ]
Qualifications not known	[ ]	[ ]
Not applicable; no mother or father	[ ]	[ ]

C.3. Do either of your parents have a job?

Yes, mother has a job	[ ]
Yes, father has a job	[ ]
Neither parent has a job	[ ]

C.4. If your parents have a job, do they work full-time or part-time?
(Full-time = more than 35 hours per week,
Part-time = up to 35 hours per week)

	Mother	Father
Full-time	[ ]	[ ]
Part-time	[ ]	[ ]
Not known	[ ]	[ ]

C.5. What kind of position does your parent occupy at work?

	Mother	Father
In charge of others:		
Manager	[ ]	[ ]
Supervisor	[ ]	[ ]
Timekeeper/Foreman	[ ]	[ ]
Employee-not in charge of others	[ ]	[ ]
Self-employed	[ ]	[ ]
Cannot say/not known	[ ]	[ ]

C.6. What is your parent's actual job or occupation?

	Mother	Father
Actual job	_____	_____

C.7. Is either of your parents retired or disabled?

	Mother	Father
Retired	[ ]	[ ]
Disabled	[ ]	[ ]

Appendix 14

THE NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE

Name _____

Date _____

School _____

Directions: In each of the 40 items below tick either YES or NO.

		YES	NO
1	Do you believe that most problems will solve themselves if you just don't fool with them?	[ ]	[ ]
2.	Do you believe that you can stop yourself from catching a cold?	[ ]	[ ]
3.	Are some people just born lucky?	[ ]	[ ]
4.	Most of the time do you feel that getting good grades meant a great deal to you?	[ ]	[ ]
5.	Are you often blame for things that just aren't your fault?	[ ]	[ ]
6.	Do you believe that if somebody studies hard enough he or she can pass any subject?	[ ]	[ ]
7.	Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?	[ ]	[ ]
8.	Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?	[ ]	[ ]
9.	Do you feel that most of the time parents listen to what their children have to say?	[ ]	[ ]
10.	Do you believe that wishing can make good things happen?	[ ]	[ ]

		YES	NO
11.	When you get punished does it usually seem it's for no good reason at all?	[ ]	[ ]
12.	Most of the time do you find it hard to change a friend's (mind) opinion?	[ ]	[ ]
13.	Do you think that cheering more than luck helps a team to win?	[ ]	[ ]
14.	Do you feel that it's nearly impossible to change your parent's mind about anything?	[ ]	[ ]
15.	Do you believe that your parents should allow you to make most of your own decision?	[ ]	[ ]
16.	Do you feel that when you do something wrong there's very little you can do to make it right?	[ ]	[ ]
17.	Do you believe that most kids are just born good at sports?	[ ]	[ ]
18.	Are most of the other kids your age stronger than you are?	[ ]	[ ]
19.	Do you feel that one of the best ways to handle most problems is just not to think about them?	[ ]	[ ]
20.	Do you feel that you have a lot of choice in deciding who your friends are?	[ ]	[ ]
21.	If you find a four-leaf clover do you believe that it will bring you good luck?	[ ]	[ ]
22.	Do you often feel that whether you do your homework has much to do with what kinds of grades you get?	[ ]	[ ]
23.	Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?	[ ]	[ ]

		YES	NO
24.	Have you ever had a good luck charm?	[ ]	[ ]
25.	Do you believe that whether or not people like you depends on how you act?	[ ]	[ ]
26.	Will your parents usually help you if you ask them to?	[ ]	[ ]
27.	Have you felt that when people were mean to you it was usually for no reason at all?	[ ]	[ ]
28.	Most of the time, do you feel that you can change what might happen tomorrow by what you do today?	[ ]	[ ]
29.	Do you believe that when bad things are going to happen they are just going to happen no matter what you try to do to stop them?	[ ]	[ ]
30.	Do you think that kids can get their way if they just keep trying?	[ ]	[ ]
31.	Most of the time do you find it useless to try to get your own way at home?	[ ]	[ ]
32.	Do you feel that when good things happen they happen because of hard work?	[ ]	[ ]
33.	Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?	[ ]	[ ]
34.	Do you feel that it's easy to get friends to do what you want them to do?	[ ]	[ ]
35.	Do you usually feel that you have little to say about what you eat at home?	[ ]	[ ]

		YES	NO
36.	Do you feel that when someone doesn't like you there's little you can do about it?	[ ]	[ ]
37.	Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are?	[ ]	[ ]
38.	Are you the kind of person who believes that planning ahead makes things turn out better?	[ ]	[ ]
39.	Most of the time, do you feel that you have little to say about what your family decides to do?	[ ]	[ ]
40.	Do you think it's better to be smart than to be lucky?	[ ]	[ ]

Appendix 15

STANDARD
PROGRESSIVE MATRICES
SETS A, B, C, D, & E

Name.....

Place..... Date.....

Age..... Birthday.....

Test begun..... Test ended.....

	A		B		C		D		E
1		1		1		1		1	
2		2		2		2		2	
3		3		3		3		3	
4		4		4		4		4	
5		5		5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
10		10		10		10		10	
11		11		11		11		11	
12		12		12		12		12	

Time	Total	Grade

Tested by.....

Appendix 16

Coding Categories

Attachment

1 The primary caregiver

2 Early attachment

3 Early relationship with mother

4 Early relationship with father

5 Relationship with other members of family

6 Attachment formed since childhood

Home and family environment

7 Assessment of home environment

8 Present relationship with mother

9 Present relationship with father/stepfather

10 Family cohesiveness and support

11 Parents relationship with each other

12 Parents relationship with other members of family

13 Description of community lived in

14 Home study

Parental interest in education

15 Parental support and interest in education: Mother

16 Parental support and interest in education: Father

Locus of control

17 Children's perception of self

18 Good and bad childhood experiences

19 Future plans and self development

20 Strong and weak points

21 Important activities in life

Mentor

22 Experiences and persons who have influenced life

23 Persons admired and wished to emulate, and why

24 Confidantes and advisers

25 Persons with confidence in child's ability to do well

Schools/Teacher Effectiveness

26 Early schooling: Preschool

27 Infant/Primary after preschool

28 Common Entrance Examination (CEE)

29 Secondary school after primary

30 Caribbean Examination Council (CXC) examinations

31 Views on subjects taught

32 Relationship with classmates

33 Good and bad school days

34 Assessment of teachers

35 Perceptions of good teachers

36 Perceptions of poor teachers

37 System of reward and punishment

38 Responsibilities given at school

39 The first year at Community College

40 Children's view on education received

Appendix 17

Brief Reports on Four Resilience Groups

Primary non-resilient group

PNR/M#001

Very big for his age, with a deep heavy voice. He strikes me as a bully. My first impression of him was of one who was very aggressive. During the interview the reasons for his aggressiveness were revealed. He is a victim of child abuse, a witness to spousal abuse, and on many occasions has to defend himself against the bigger boys in his neighbourhood, most of whom deal with drugs.

He is not interested in school; and if he had his own way he would find something more "useful" to do with his time. In other words he places no value on education and considers going to school to be a waste of his time because he is yet to see how he can benefit from a good education. Hence, he has no confidence in his ability to do well and has resigned himself to the fact that he is incapable of acquiring a high education.

PNR/M#002

Sad, but aggressive and very unkempt. He is so full of hate for his father and stepfather, and to some extent, his mother. He felt neglected by them. But the question is, why didn't he take advantage of the opportunity offered by his grandmother? He turned away from a chance to be in a safe and secure home, with someone who obviously cared for him and would have guided and inspired him. Instead, he chose to be deviant and rebellious; and used these negative qualities as strategies to cope with the stressful circumstances which he faced.

He had a very unstable childhood moving back and forth from one ghetto area to the next. He frequently got involved in fights and criminal activities such as petty theft,

drug peddling and drug abuse. His mother did not set an example. She too was an alcoholic and a victim of drug abuse.

He was not interested in school and therefore did not take his school work seriously. He frequently absented himself from school, and there was no one at home to take an interest in his educational progress. It was not surprising that he did not succeed at school.

PNR/F#003

She looks a few years older than she actually is. She seems to be pre-occupied. I could sense a deep feeling of resentment towards her parents and fear of her father. This may very well be as a result of her subjection to his of sexual abuse, and a victim of her mother's alcoholism.

She was nervous at the beginning of the interview, and was a bit hesitant to divulge information about herself, her home environment, and her relationship with her parents. About ten minutes into the interview the "hard outer protective shell cracked", and the child "poured her heart out" to me. She has endured a great deal and has been under tremendous stress. Gradually I understood her anger and her fear. She doesn't feel good about herself; a clear indication of a "bruised" self-esteem and ego. There were three stoppages to allow her time to regain her composure after tearful outbursts.

Her school performance has been negligible with most of her test scores from Standards 2 to 4 below average; and I can understand why she finds it very difficult to concentrate on her school work. She does not have the capacity to cope with the stress that she is under. There is a lack of enthusiasm about her, and I believe that school is the last place she wants to be in.

PNR/F#004

He appears to be a sickly child, probably asthmatic, and looks undernourished. He seems very nervous, constantly playing with his fingers and scratching his body. He is soft-spoken and has to be coaxed to speak up. This too seems to be a consequence of his nervousness.

However, he speaks well but did not readily volunteer information at first until he was prompted. Fifteen minutes into the hour and a half interview he settled and became an eager participant.

What occurred to me as unusual was that despite his obvious frailty and poor health, he loves such physical sports as football and basketball, and wants to play them professionally. He doesn't seem too keen on school, although he is one of the two primary non-resilient students who received encouragement from home, and did form an early attachment with his mother. It is possible that because of his ill health, his mother is over protective towards him.

PNR/F#006

A primary non-resilient child who also had a very turbulent childhood as a consequence of domestic violence. For the most part she was left in the care of an older sister because her mother was always running away from the father and from home. During that period, she was constantly being moved around among neighbours, sisters, mother and grandmother.

This insecure childhood could not have provided any early attachment or emotional stability for the child. In her own words she described her situation in poetic terms as:

> "A little girl who wasn't cared for by her mother and her father.
> She was mostly taken care of by her big sister; sometimes neighbours
> and sometimes friends."

She is epileptic, and has had frequent attacks in her childhood and during the early and mid-primary education stages. I have witnessed one of her attacks in church during a school rally, and assisted in getting her to hospital. It would be interesting to find out whether epilepsy can in any way affect the brain or a child's mental capacity to learn.

She claimed that all the turmoil in her life could have impinged on her ability to perform well at school. I tend to agree with her.

PNR/F#007

This was the first case of a primary non-resilient child who grew up knowing that her mother doesn't love her. She claimed that her mother admitted it when she confronted her about the way in which she was being treated by her (mother).

The child apparently has grown close to her father who, incidentally is out of the house for long hours almost everyday. The mother resents that father-daughter relationship and the child believes that she will stop at nothing to put a stop to it. The child was drawn close to her father when she sensed her mother's resentment towards her. There are frequent incidents of quarrels and fights between the parents, one of the reasons why the father stays away from home.

There is no relationship between her and her siblings who take advantage of her, knowing how the mother feels towards her. She has to do all the house chores and play the role of mother sometimes to the younger ones.

She is always late for school although she lives about 100 yards from the school. It is not surprising that she receives no encouragement from home, and finds very little time to do her assignments. She is very casual about school, and does not seem to see the importance of having a good education. The impression given is that she does not care to achieve it. Nobody cares, so why should she? Although she is close to her father, he does not take an interest in her educational progress.

PNR/F#008

She spent just the first few months of her life with her mother, before she was given away to a grand-aunt who wanted someone to live with her in the country. She remained with her until she was eight years old, and apparently did not like the neighbourhood very much even though she was taken good care of at home by her aunt. She visited her mother in a ghetto area on several occasions, and preferred to live there.

Although she admitted to getting encouragement from her mother who worked as a maid for long hours away from home every day, she did not always pay heed; so disobedience emerged as one of her qualities.

Due to the fact that her mother worked long hours, there was little supervision at home. She capitalised on that, and frequently got together with the "gang" in the area. Her school work suffered as a result, but she seemed unconcerned about that. She has no future plans and failed to see the importance of it. She gives the impression that she wants to be left alone to be able to do as she pleases. The question is, why would a child of average intelligence, with an aunt who is willing to take good care of her, and with good teachers to teach her want to develop this kind of attitude?

PNR/F#009

She was the first primary non-resilient child interviewed. She is small in stature, and looks rather unkempt. Surprisingly, she was one of the most fluent children interviewed with a good vocabulary for her age. I took great pleasure talking to her, and wondered about the acquisition of such fluency.

She was brought up in an overcrowded home as part of an extended family. She eventually found a way out of it by spending a night with an aunt, and staying.

But the harm had been done. She admitted to being extremely aggressive, and have been from very early childhood. She always gets involve in fights and confrontations to prove to people that she is fearless. But is she? Maybe deep down is a child crying for help, seeking emotional support and attention. She felt neglected by her mother who was always out on the streets; a young mother; a secondary school dropout who, now in her early 30's has given birth to nine children.

Her grandmother, in all cases acted as mother substitute, but she too had her own children to take care of and other grandchildren from other daughters in the home, who left the child-rearing for her to do. Although the grandmother took good care of her as an infant, this was not sufficient to help her cope later with the stresses generated from the home and family environment. Hence, she could not succeed at school because the environment was not conducive for learning, she received no parental support and encouragement, and it did not matter to her what the outcome. Her only interest is playing netball, and according to her she doesn't have to attend school to learn how to play.

PNR/F#010

A primary non-resilient child with a history of psychosis running in her family. Her mother, grandmother, two aunts and an uncle are psychotic.

She was brought up by her mother for the first three to four years of life, who attempted to kill her from very early; an incident she remembered quite vividly. She was neglected and felt so. It affected her to the extent that she was rebellious and displayed aggression from one year old.

She was given away to her foster mother by her mother who no longer wanted her; yet she followed her around even at school in order to physically abuse her, which she did.

She did not even feel safe at her foster mother's home. Her grandmother lives with them, and she (PNR/F#010) has also been a victim of vicious attacks by her. She carries many scars on her body, and has been treated many times at hospital for injuries.

Can a child cope with life under these adverse circumstances? She tried to find an easy way out of her stressful situation by attempting to commit suicide on two occasions, and is planning a third attempt; this time she hopes to succeed. However, what was most surprising was the fact that she admitted not hating her mother, and looks forward to the day when she will be in a position to take care of her; that is if she is still alive. That wish might probably deter her suicide plans.

PNR/F#026

Very aggressive looking. A brief discussion with the Principal of her school revealed that she frequently gets involved in fights with the other students, and has been suspended on many occasions. I got the impression that the school will be happy to be rid of her.

She hates it at home where she feels neglected, and frequently physically and verbally abused. She hates being at school too, where she believes that she is deliberately picked on by staff and students.

Her school performance over the past three years has been pathetic, and she seems unconcerned about it. She was one of the few students interviewed who was not quite fluent in English. This is probably due to the fact that "Patois" is the only language spoken at home. In addition, her father never attended school, and her mother dropped out of Primary School. Neither parents is in a position to help her with her assignments because of their inadequate educational background.

She is the fourth of five siblings, and does not seem to have a good relationship with them.

Primary resilient group

PR/F#034

She strikes me as a very happy girl. What is significantly important is that she is surrounded by people who love her and whom she loves. The fact that she is poor is insignificant as far as she is concerned, and doesn't seem to bother her. She is almost unaware of it and seems unaffected by it, but not totally. The inability of her mother to provide her with the things she needs, for example school textbooks and uniform; and the infrequent meals are common features.

The only sad feature in her life is not knowing who her father is. She was presented with two, one late in her life. But that does not lessen her zeal and enthusiasm to excel in whatever she does. She is a firm believer in God. She is quite pleasant and an excellent conversationalist. I really enjoyed talking to her. She speaks very highly of her teachers and some of her classmates. Her school grades have been exceptionally good, and these are frequently accompanied by some excellent remarks. She loves school and can't wait to go there.

PR/F#035

She had a very unstable childhood having to move from one home to the next from age 2 1/2 years. She has lived in seven different homes in her young life; but in spite of this instability, she is able to maintain good grades at school.

She is a bit shy and lacks self-confidence in expressing herself verbally. She too had to be made to feel at ease and gently coerced and prompted, but not as much as PR/F#038. After the first fifteen minutes she was completely relaxed and spoke quite freely.

She too seemed to be ashamed of the poor conditions and did not know how to react when I visited the home to seek her parents approval to speak with her.

PR/F#037

She did not have a good childhood. Her mother resented her from birth because her father left her when she was pregnant with her, and migrated to another country. From an early age she was sent to live with her father's relatives. It was the only way to get financial support from her father. When he returned to St. Lucia eight years later, her mother took her back in to live with her. She was caught between a "war of words" between her parents. However, despite of this stressful situation, she grew up to be a pleasant and determined child. She was positively influenced by her grandfather whom she was fairly close to, and a cousin who was a teacher.

She has a deep faith in God, and goes to church quite regularly. She mingles with the church members most of whom are very supportive.

At school, her teachers also have been very helpful and motivative. With her intellectual ability and determination, it was not surprising that she achieved educational success at the primary school level. She is able to overcome the stressful situation in her life, and strives to maintain her position in the top five in class.

She is still under stress at home living with stepfather number 3, whom she dislikes because he makes her feel like she doesn't belong. He is the father of her last two siblings and cares only about them. Her home was one of the most poverty stricken homes that I visited, and it is difficult to understand how they can survive on the mother's meagre income. But apparently they do.

PR/F#038

She is a "strange" girl. She was removed from an environment where her extended family live under the most deplorable conditions, to one which is less deprived, yet she wants to be back in her former home. Was she getting something from her former home that is lacking in her present home?

She has a great deal of confidence in her approach to her school work. This became evident in the manner in which she talked about her school life and how she intends to get a good education to achieve her future goals. But for one who reads a lot, she lacks the self-confident to express herself verbally. Occasionally she had to be cajoled and prompted in order to get the required responses from her.

PR/F#039

She looks abnormal. She came from a family most of whom have some form of abnormality. But to date, she has been able to fight it, and with the help of her mother, grandmother and uncle, and her own determination went on to achieve educational success. A splendid achievement too for someone in her condition who was placed in the mainstream of primary education.

She surprised me too. While I was contemplating on the best way to initiate the interview, she began to ask questions about my work. She actually helped to put me at ease. My fears about getting very little information from her was wrongly placed. She was quite confident and spoke freely on each of the main categories on the interview schedule. She is quite pleasant with a very warm smile.

Her home condition was among the most deplorable ones visited, but she seemed completely unaware of it. This is an indication that she has accepted what she cannot readily change. She continues to do well at school, and hopes to become a child psychologist working specifically with disadvantaged children like herself. She too has faith and she is deeply religious like the rest of her family. Talking to her was indeed a learning experience for me.

PR/F#040

She was surrounded by love, love which confused her and made it difficult for her to determine who she was closest to: her grandmother, aunt, or her mother. They all seemed to have taken good care of her from infancy.

The most remarkable thing about her was her christian life and her deep faith in God. Being a true christian is her first priority; the second is education.

Being poor doesn't seem to affect her at all, and I believe that her christian and her deep involvement in the church may have helped in that regard. She has been able to maintain good academic performance at school, and attributes that success mainly to her hard work and her deep faith. She places a high value on education, and from all indications, she is not prepared to give up in school until she has achieved her goals.

PR/M#041

A very pleasant child. He was constantly smiling throughout the interview and was very eager to talk about himself, his home and family and his performance at school. He seems quite pleased with his accomplishment, and is determined to accomplish more in the future by owning his own manufacturing plant.

Although he lives with a very abusive father whom he dislikes, he likes to be home so he could protect his mother against him. He is very attached to his mother whom he admires for staying with his father in order to keep the family together.

He loves to go to school and finds pleasure in his studies. He gets a lot of support and encouragement from his mother and other family members. The teacher's comments on his record card are positive and very encouraging.

PR/F#042

Like PR/F#035, PR/F#042 had a very unstable childhood having to move from one district to the next. She was a victim of child abuse from her stepfather and a frequent witness to spousal abuse; both father and stepfather frequently beat her mother in her presence.

In spite of the above circumstances, she has done consistently well; well enough to pass the Common Entrance Examination.

She was a bit nervous at first but quickly settled and within minutes was able to converse quite fluently and without fear of holding anything back.

What was remarkable was her memory. She has a vivid memory of her early childhood and could recollect many experiences both good and bad, but mostly bad. The only good memories seem to have been spending time with the people who cared for her namely, her mother, grandmother and aunt.

Her schooling is what is most important to her. She has been consistent in her academic performance. Like PR/F#038 she is an avid reader.

SR/M#043

A very pleasant and likable child; he is well-mannered. He speaks very well, quite distinct, and takes pleasure in pronouncing his words properly. He strikes me as someone who does speech practice.

He had a good childhood despite being poor, and appeared to have been spoilt by family members and friends; and I can easily understand why. He is very charming and full of charisma. He said that he has been like that since early childhood. It was difficult for him to determine who he was closest to. He received a lot of love, support and attention. Most of his family members seem interested in his school work and follow his educational progress attentively.

He knows what he wants and what he must do in order to achieve it. He wants to be the first doctor in his family. Very ambitious! His school grades are quite good, and he intends to maintain them throughout his school career.

His father is now a permanent resident of The United States, and has been away from home for about five years. However, his mother must be credited for producing such a loving child. They have a strong relationship, a deep faith in God, and a very good rapport. His mother is his best friend.

PR/F#053

Another very pleasant child with a deep faith in God. Although she has had to live with several stepfathers, that did not seem to have any negative effect on her. She seems to have a good relationship with her present stepfather whom she speaks very highly of. She is also very close to her mother and has been from infancy.

Although very poor, the home and family environment is good and cohesive. She finds love, support and attention from home. Her mother, a secondary school drop-out is keenly interested in her education, and assists her with her assignments.

She has learnt to accept the fact that she is poor, and from that young age she is determined to improve her home conditions. She places a high value on education and has realised that in St. Lucia it is an important pre-requisite to a good and prosperous life; and she intends to have one.

Secondary non-resilient group

SNR/F#077

A victim of a childhood marked by a father's indifference. Apparently her father did not want a child when he discovered that his wife was pregnant with her. He felt that he was too old and told his wife that he did not want the child. Her mother gave birth to her anyway, and she turned out to be the source of most of their home troubles which included domestic violence.

Against the odds, the mother did her best to bring her up properly. She admitted to having a good mother and a good childhood under the circumstances. She was also close to her grandmother and godmother.

At the age of ten years she and her father finally developed a relationship, close enough but with some reservations. Her mother would encourage her to work but not her father; neither of them could help with her school work because they are illiterate.

She is extremely talkative and usually finds herself in trouble because of her "loud mouth". She could have done better at the secondary school, but got involved in peer groups and was subjected to peer pressure. She did not take her work seriously at the stage when she should have.

Although the fights between her parents were less frequent, the atmosphere at home was still tense whenever they were at home together. She got involved in frequent arguments with her brothers some of which were quite heated. It was difficult to study at home and she made no effort to make alternative arrangements. Her work suffered as a consequence.

SNR/M#078

I have never come across any student who is so full of hate and so impassionate. Once again the question arises, how do you expect a child to react or feel when throughout his life he has been constantly reminded by his mother that she does not love boys?

He has lived with almost all his relatives, spending a few months here and there; a typical case of instability from infancy to the present. He has a vivid memory of his childhood and recalls his mother always wishing that he was dead. Everyone seems to prefer his twin sister and makes it clear to him that he is "nothing"; they make him feel inferior.

He has the potential to do well, but every time he tries to do something he is pressured and discouraged; but instead of persisting, he gives up. Now all he wants to do is to live as far from all his relatives as possible, and to live like a hermit.

He grew up to be very aggressive and rebellious, and is not afraid to confront anyone. He was removed from pre-school because he gave trouble, and gave even more trouble at the Infant/Primary Schools. He was suspended on many occasions at the secondary school for being rude to teachers, and deliberate disobedience. I get the impression that he gets pleasure from this kind of abnormal behaviour.

SNR/F#079

The first from the secondary non-resilient group interviewed. She can't remember being close to her mother but her father during her early childhood; although the primary caregiver seems to have been the mother.

This interview was very emotional. She cried almost throughout its duration, but especially when she was describing her relationship with her parents and siblings. She feels like an outcast, she no longer has a close relationship with her father who turned against her when he discovered that from age twelve years in Form 1, she had a boyfriend and was not prepared to give him up. The boy was three years her senior (Form 4).

Since then all parental support (financial and emotional) given to her during the first twelve years of her life ceased. She therefore turned to her boyfriend when she wanted uniform and school books. She is under constant pressure from home. Her father refuses to speak to her, her mother does and to some extent sympathises with her, but due to fear of the father, does not want to get too involved with her daughter.

She did well at the Primary School because her mother was there to encourage, support and inspire her; and she was the first member of her family to achieve a

secondary education. However, she failed miserably at the CXC examinations. Naturally she blamed the tense situation at home, and herself to some extent.

SNR/M#080

While his mother was out looking for work his grandmother took care of him. His childhood was fairly unstable. The family lived in three different homes before the present one. They are extremely poor, and his mother is worried about it knowing that there is little that she can do for her very large family; she never went to school.

His father has other partners besides his mother and spends a great deal of time away from home; a quality he claims he inherited from his father and also his grandfather (his father's father).

He did well at primary school because he was shy and had no alternative but to spend time studying. He did not write the CEE the first time because the teachers felt that he was not quite ready. When he wrote the exam the following year, he was successful.

He became less shy at the secondary school. He became involved in almost every non-academic activity, and by the time he got to Forms 4 and 5 he was totally distracted by the opposite sex. He took his school work less serious and went to school just to show how "macho" he was. This situation coupled with the poor home conditions and deteriorating family relations, affected his ability to perform well at the CXC examinations.

SNR/F#081

To some extent one has to admire this child. From a very tender age, she was deserted by both parents, both alcoholics, who went their separate ways with different partners. They left seven children in a small two-room house in the care of the oldest daughter who was sixteen years old at the time. She did not know the first thing

about bringing up a family, although she had one baby of her own at the time. She did her best under the circumstances with the help of an older brother.

But she (SN/F#081) felt alone, betrayed, emotionally drained, and grew up as a quiet and passive child, not admitting that things were bad at home.

From about age seven years she had to do things for herself for example, combing her hair for school, ironing her uniform, preparing something to eat.

She failed the CEE the first time and used this as a motivator to succeed the second time. She did. Besides, I think that she wanted to please her peers and keep up with them, but felt hurt when all of them passed the CEE and she didn't.

At the secondary school the situation at home got more critical; one uniform, no school books (although a few friends gave her what they used), no parental support and encouragement except from a brother who "escaped" to the United States on a Sports Scholarship, but that was not enough. When it mattered most, she lost the will to persevere. The negative factors in her stressful home and family environment were too powerful.

SNR/F#083

Surprisingly, or should I say amazingly SNR/F#083 and SNR/F#0079 live in the same area; in fact they are close neighbours house number 33 and 34. Their lives follow a very similar pattern.

The interview with SNR/F#083 was very emotional. She too feels like an outcast at home because she is the only one in the family to get a secondary education.

Although her mother was not working, she was raised by several different people: aunts, grandmother, and a cousin. She moved from one home to the next, and it was very difficult to form any early attachment although she claimed to have been close

to one of the aunts.

She admitted that her mother was unable to take care of her and send her to school; hence the reason why she had her moving from one home to the next. She is back at her mother's home for a few years now (since Form 3) and everyone at home seems to be going out of their way to make her feel unwelcome.

There has been no home encouragement except at the aunt where she stayed three years before writing the CEE. However, during her final year at the secondary school she did attempt to seek help from the people at the Baptist Centre, a religious group from the United States. But the instability, family conflict, and disharmonious environment proved too stressful to cope with.

SNR/M#084

He did not live with his natural father and so had no regard for the two stepfathers he has lived with.

He was raised by his aunt, not his mother who was also an alcoholic. He went to live with his mother at age eight or nine years, and was quite happy to be rid of his first stepfather who was very abusive. There were frequent fights between his stepfather and his mother. The same was true with the second stepfather, but the fights were less frequent.

He passed the CEE the second time; he did not write the first time due to his low level of readiness. He was determined to pass the second time, and did. At the secondary school he had fun, he was very casual about his approach to school and blamed teachers when things did not go right for him.

He got no encouragement from the home, but occasionally received support from his aunt whom he felt safe and secure with in infancy.

SNR/F#085

She was raised by her parents and has always lived with them. The mother was very strict and usually punish her for doing anything "wrong".

She had a fairly safe and secure childhood, but when her parents took to drinking and became alcoholics everything began to go wrong in the home. Domestic violence, child abuse, tension and fear of being severely beaten, parental neglect and emotional instability were common features.

She sat the CEE the first time and passed, but her mother did not send her to the secondary school because it wasn't her first choice. She wrote a second time and passed. This time she passed for the school of her first choice, and was sent. As the situation at home worsen, her school performance at the secondary school deteriorated despite her attempts to concentrate on her work. This she found very difficult to do at home because of the constant interruptions: doing house chores, running errands, being verbally abused, fights.

The risk factors in her life were too adverse and outweighed the protective factors. She suffered the consequences of this imbalance.

SNR/M#091

Here is another child who had nothing good to say about his father because of the abusive manner in which he treated his mother, his brother and himself.

He grew up well despite that situation because his mother tried her best to bring him up properly with assistance from other persons. But later in life instead of continuing on the same track, he was prepared to sacrifice his school work to achieve his dream as an athlete, not realising that in St. Lucia you cannot acquire mastery in athletics without a good education which is essential to secure an Athletics Scholarship.

He joined peer groups, subjected himself to peer pressure, missed school when it mattered the most, and did not prepare for CXC examinations. To him education was not important, athletics was. He finally realised his mistake, but it was too late by then.

One more student, although he was given advice did not pay heed, and approached his schooling in a lackadaisical manner; too casual. It was not at all surprising that he did not succeed.

SNR/F#097

Another victim of child abuse. She was raised by her grandmother who wouldn't stop beating her any time she cried as a baby. Her mother was out during the day. Her father was out most of the day too. Her apparent attachment was to a cousin.

She has had two stepfathers since her parents were separated. She was not well fed and admitted to being hungry most of the time and usually went to an aunt who fed her. Her mother left her father and the children, but returned when she was in Standard 2. So for a year or two there was some stability in her life until after the CEE when things began to go wrong again. Her mother left home this time taking the children with her.

"Two stepfathers and hell" was how she described what followed. The consequence was her inability to cope with her school work and subsequently failed her CXC examinations. There was no parental support and no encouragement.

Secondary resilient group

SR/M#103

The student with the highest level of intellectual ability, but had to be motivated by his teachers (in order) to put it to good use. He knows what he wants but he is not

quite sure how to achieve it. He has worked hard and has achieved educational success despite the conditions under which he lives.

I can't help but admire him. I know the neighbourhood where he lives and I have seen the conditions under which he lives. He could easily have become influenced by the neighbourhood gangs and join ranks with them. He did to some extent. To buy his school books and uniform, pay his school fees and transportation he sold drugs to neighbourhood gangs for the "middle man", and got paid for it. He also gambled in order to make money. It didn't take him long to realise the importance of acquiring a good education and concentrated instead on achieving it. He gave up his bad habits after getting help from teachers and relatives.

His parents are illiterate and are in no position to help him. His father is an alcoholic. He was frequently abused as a child physically. He was also a witness to frequent spousal abuse and this made him very resentful towards his father. He had nothing good to say about him.

The home environment was not conducive to learning, but he sought alternative location from which to work. He stayed back after school, used the library and the primary school nearby. He is the only student in his neighbourhood to make it to the Community College; a great achievement for him.

SR/F#104

Despite being sad looking, she was so full of confidence! She has accepted the fact that she is poor and is determined to improve her living conditions. She is also very proud of her educational accomplishments because she is the only girl in her neighbourhood to gain admission to a post-secondary institution. She considers herself to be a role model and is determined to live a life that will gain respect from the people in her community.

She was deserted by her father from a very tender age, but that did not deter her from growing up and achieving educational success at the primary and secondary education stages. Her mother gave her the support she needed and encouraged her although she was not able to help with assignments.

She developed an eye problem as a consequence of years of studying with light from a kerosene lamp and candles. Electricity was recently installed at her home. She could have easily given up, but didn't. She wants to prove to her father that she can make it to the top without his help, and can improve their living conditions. This is the driving force behind her studying.

SR/M#105

A student who will be scarred for life both physically and emotionally. Scars, deep scars inflicted on him mostly by his father.

He was a victim of child abuse, and grew up without forming any bonds except with an older sister. His father never gave his mother a chance to get close to him or any of the other family members.

He is a sickly boy who suffered from malnutrition in his childhood, and even at the late Primary and Secondary school stages he frequently went to school without having a proper meal. By then he knew what he most wanted to achieve and would not allow anything to stand in his way of achieving it. When his brothers stayed away from school, he went. He tried not to miss one day. His family live in absolute poverty, and he is determine to get them out of it. He was the only one in the family to receive a secondary education. Like SR/F#110, his home circumstances and the negative comments from his peers motivate him to excel at school.

His father is deceased now; he died last year of epilepsy. Surprisingly, he was the one who spent the most time with him and cared for him until his final moments.

He admires his mother for taking so much abuse from his father and sticking it out because she wanted to keep the family together. He is quite fluent in English, and his interview is the longest and probably the most informative.

SR/M#106

He is one of the few resilient students who was not a victim of domestic violence and child abuse. Like most normal families, his parents had disagreements but these were not frequent.

Both his parents are illiterate. They never attended school, but his mother would insist that he goes to school and study hard so that he can achieve what they never had an opportunity to achieve. His parents are in their early sixties and of Indian heritage. In their early days Indians did not place such a high value on education. But more recently the situation has changed, so they are trying to ensure that the younger generation gets a good education. Hence, she would do most of the house chores to allow him time to do his school work; which he did.

He is the only one in the family to have achieve educational success, and he is very proud of it. He is determined to make his family proud and is therefore even more determined to do well at the Community College.

These are the reasons he gave for his success: he studies hard; his mother encourages him and gives him all the time he needs to study; he has had some good teachers, and he also has faith in God.

SR/F#107

How does a child feel when she realises that her father constantly compares her with his children by another woman who is also his wife? They always seem to be doing better than her according to him. How does that affect the emotional development of the child?

It seems that this second family situation has really affected SR/F#107. She is totally devoid of any affection for her father and totally distrusts her mother who has allowed her father to dominate her life.

How does a child feel when she realises that her mother shows more affection towards a father who does not live home but with someone else, than towards her own child whom she sees everyday? What kind of mother is that anyway? This is the question that she is seeking an answer to.

She uses her situation as a prime motivator to do well in school so she can help get her mother out of her present situation and become less dependent on her father. She also wants to show her father that she is capable of doing just as well or even better than his other children.

SR/M#108

He strikes me as having a very strong character. He is short and small for his age, and looks underdeveloped. He does exceptionally well at school but shies away from persistent praise and attention. I sensed too that he is ashamed of what his parents have achieved and his home, and as a consequence he makes no effort to invite his friends to his home. He is fearful of how his friends will react if they discover the poor conditions under which he lives.

He wants to achieve the near impossible but he has a vague idea as to how he can achieve it. He is also deeply religious and attends church services regularly with his mother. He wants also to become a preacher; not a catholic priest because he wants to have a family of his own (he is catholic).

There is no love for his natural father who deserted his mother when she was pregnant with him. I sense a deep resentment for him and for men like him. His one wish is not be anything like his father.

He is exceptionally intelligent, and has always maintained excellent grades throughout his secondary school education. He achieved nine CXC subjects with Grade 1's, and is currently pursuing a two science programme at the Division of Arts, General Studies and Science at the Community College. However, he seems very modest, and insists that his educational success is mainly a consequence of hard work, his faith in God, and support from his mother; not because of intelligence.

SR/M#109

Yet another student who has witnessed domestic violence at home, and has no great love for his father because of his abusive behaviour and unfaithfulness to his mother. As a consequence, he got very attached to his mother who tried to protect him from his father. However, when he was old enough the protective role changed, and he was the one who protected his mother from his father.

I got the impression from him that his father was trying to retard his development by preventing him from doing the things he loved most. He paid no interest in his educational progress, and did not provide any kind of support for him. He too was a heavy drinker and a compulsive gambler, and usually took their lunch money to gamble or drink.

He wants his mother to leave his father, but his father so far has been successful in influencing her that she can never make it out on her own without him. He is determined to do well enough at school so that he will be in a position to help his mother become less dependent on his father.

Like SR/M#105 and SR/F#110, he also wants to do well at school so that he can help his mother and his brothers and sisters out of the adverse conditions under which they live. So far he has succeeded in doing very well at school. He too is exceptionally intelligent.

SR/F#110

An excellent conversationalist, sharp, and did not hesitate to be a willing participant. I got the impression that she was longing for such an opportunity to discuss her life. To some extent, she had an unstable childhood. There was no father figure during the first five years of her life. Her mother was frequently out looking for odd jobs to make money to feed them, and left them in the care of a cousin and sometimes friendly neighbours.

They moved to St. Lucia from Barbados after migrating there for four years (she was one year old) to live with her father. By then, she was becoming attached to her mother and did not want a father figure in her life. In fact, she resented it and utterly disliked him for the abusive manner in which he treated the family especially her mother. He has no regard for them, does not support them, and takes no interest in their lives or whatever they do.

She found it very difficult to study at home because of all the noise usually caused by her father, and the deep tension present whenever he was around. They still live in a small house, but I got the impression that her father can improve their way of life but he does nothing about it. Her wish to save her family from poverty and the stressful situation at home is what motivates her to do well at school. She wants to teach her father a lesson, which is: They will make it without his help. She has developed a very strong relationship with her mother whom she speaks very highly and fondly of.

What impressed me about her was her was her determination to excel at school. She knew exactly what she wanted and how to achieve it, and she is not prepared to stop until she does. Such determination! It's almost frightening!

SR/F#111

She strikes me as being very uneasy / impatient. She did not seem nervous because she readily spoke quite freely about her childhood from the initial stage of the interview. Yet she sat on the edge of the chair and very often she would look over her shoulder like she was expecting someone.

She knows what she wants from life and how to achieve it. She has a holiday job to help finance her second year at the Community College because her mother cannot afford it. Her stepfather provides no financial or emotional support. He walked out when the responsibility became too much for him to bear. She has something to prove to her stepfather. Her father is deceased.

She lives in very crowded conditions with an extended family. The home environment is not conducive for learning, but she does the best she can under the circumstances. Although she is of average ability, she is able to maintain good grades. This I believe, tells a great deal about her character.

SR/F#112

A very good conversationalist. She spoke about her life with such ease, that I could actually visualise the child moving from one developmental period to the next. She seemed to have a good memory of her early childhood.

Although she lived in a poor rural area the language spoken at home was English which is not usually the norm. She is an avid reader. She borrows books from friends and from the library. This could have contributed to her nearly fluent English.

There was no father figure. The mother played the role of both parents and tried to support them with the little she obtained from her income.

SR/F#112 too, was the only child from her neighbourhood ever to attend a tertiary institution, this to her was a privilege. She is involved in organising many community activities; an indication of her leadership qualities perhaps. She wants to be a role model to the children in her community, and wants to help them in whatever way she can so that they too will try to achieve educational success.

She too is of average intelligence, but has done remarkably well in her school work.

Appendix 18

Summary of Measured Variables

The variables measured in this chapter are presented in the form of tables, each depicting a profile of the students in the four sub-samples.

Profile of the ten Primary Non-resilient children (PRN) in Sub-Sample 1: Variables Measured

PNR	GENDER	LOC SCORE	SPM SCORE	SI FACTOR
001	M	14	42	- 1.54
002	M	12	44	- .33
004	M	12	44	- .55
005	F	13	37	- 1.23
006	F	24	42	- .32
007	F	24	36	- 1.23
008	F	20	42	- .77
009	F	23	23	- 2.45
010	F	13	44	.12
026	F	12	-2	- 1.46

Profile of the ten Primary Resilient Children (PR) in sub-sample 2: Variables Measured

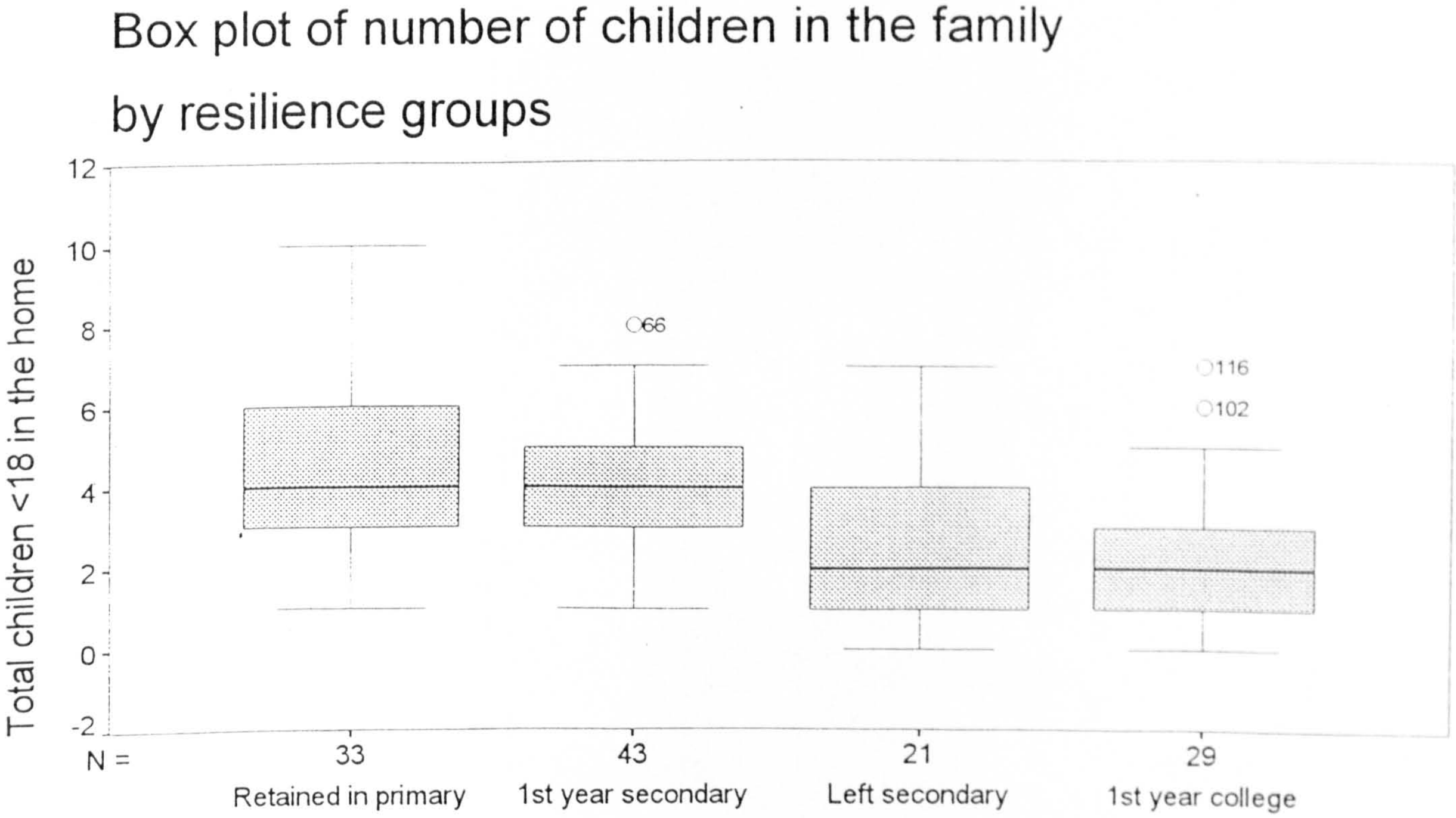
PR	GENDER	LOC SCORE	SPM SCORE	S1 FACTOR
034	F	11	34	-.55
035	F	11	47	-1.99
037	F	10	40	-1.99
038	F	14	41	-.77
039	F	12	42	-.21
040	F	13	35	-1.99
041	M	5	44	-1.99
042	F	21	37	-1.99
043	M	15	44	-.77
053	F	7	43	-.10

Profile of the Secondary Non-Resilient Children (SNR) in sub-sample 3: Variables Measured

SNR	GENDER	LOC SCORE	SPM SCORE	SI FACTOR
077	F	7	52	- .27
078	M	21	45	.12
079	F	18	46	- .77
080	M	8	47	- 1.23
081	F	17	49	- .55
083	F	8	45	- 1.23
084	M	11	51	- .27
085	F	12	39	1.10
091	M	19	40	- .27
097	F	18	45	- .55

Profile of the ten Secondary Resilient Children (SR) in sub-sample 4: Variables Measured

SR	GENDER	LOC SCORE	SPM SCORE	SI FACTORS
103	M	16	57	.17
104	F	3	47	.29
105	M	14	46	- 1.23
106	M	4	49	.12
107	F	16	50	- .43
108	M	2	55	.12
109	M	7	53	1.53
110	F	7	52	1.19
111	F	12	41	- .66
112	F	9	45	- .21



Resilience groups. Kruskal-Wallis test for difference: p=.0001

Appendix 20

CXC: PERFORMANCE OF SCHOOL CANDIDATES BY COUNTRY

	1984		1985		1986		1987		1988		1989		1990	
1	Turks&C	100	Mont.	73.79	Anguilla	64.54	B.V.I.	63.08	B.V.I.	60.21	Mont.	60.04	St. V&G	64.55
2	B.V.I.	62.5	Dominica	71.98	St. K&N	58.42	Mont.	59.29	St. K&N	55.83	St. Luc.	56.21	Mont.	61.99
3	St. K&N	62.5	St. K&N	59.83	Mont.	57.80	St. K&N	56.80	Barbados	52.67	St. K&N	55.30	St. K&N	59.73
4	Mont.	58.60	Anguilla	59.09	B.V.I	56.29	Barbados	54.92	Antigua	52.30	B.V.I.	54.78	St. Luc.	54.01
5	Belize	58.50	B.V.I.	56.25	Barbados	55.12	Antigua	53.47	Mont.	51.59	Barbados	53.01	Barbados	53.34
6	Barbados	56.64	Belize	55.86	Antigua	54.46	St. Luc.	46.42	St. V&G	48.77	St. V&G	51.68	B.V.I.	53.04
7	Dominica	55.22	Barbados	54.16	Belize	49.52	Belize	45.65	Turks&C	48.14	Antigua	49.49	Belize	50.58
8	Antigua	54.23	St. V&G	51.70	St. V&G	47.48	St. V&G	42.73	Belize	47.53	Dominica	46.98	Dominica	49.18
9	St. V&G	48.79	St. Luc.	50.16	St. Luc.	46.04	Dominica	40.37	St. Luc.	47.30	T&T	43.43	T&T	48.08
10	Grenada	41.51	Grenada	45.47	Dominica	42.86	Jamaica	38.11	Anguilla	45.15	Belize	40.47	Antigua	45.92
11	Jamaica	40.04	Turks&C	44.92	Grenada	37.99	T&T	36.44	Dominica	45.04	Anguilla	38.86	Grenada	40.26
12	St. Luc	39.49	T&T	39.66	Jamaica	36.63	Grenada	36.18	T&T	41.57	Jamaica	35.59	Jamaica	37.56
13	T&T	35.35	Antigua	39.29	T&T	35.43	Anguilla	34.52	Jamaica	37.22	Grenada	35.12	Anguilla	33.33
14	Guyana	28.97	Jamaica	39.23	Turks&C	29.66	Turks&C	26.15	Grenada	36.03	Turks&C	34.51	Turks&C	27.86
15			Guyana	25.62	Guyana	22.07	Guyana	21.58	Guyana	26.41	Guyana	18.12	Guyana	21.70

SAINT LUCIA

POPULATION AND VITAL STATISTICS

ESTIMATED MID-YEAR POPULATION BY SEX AND FIVE YEAR AGE GROUPS

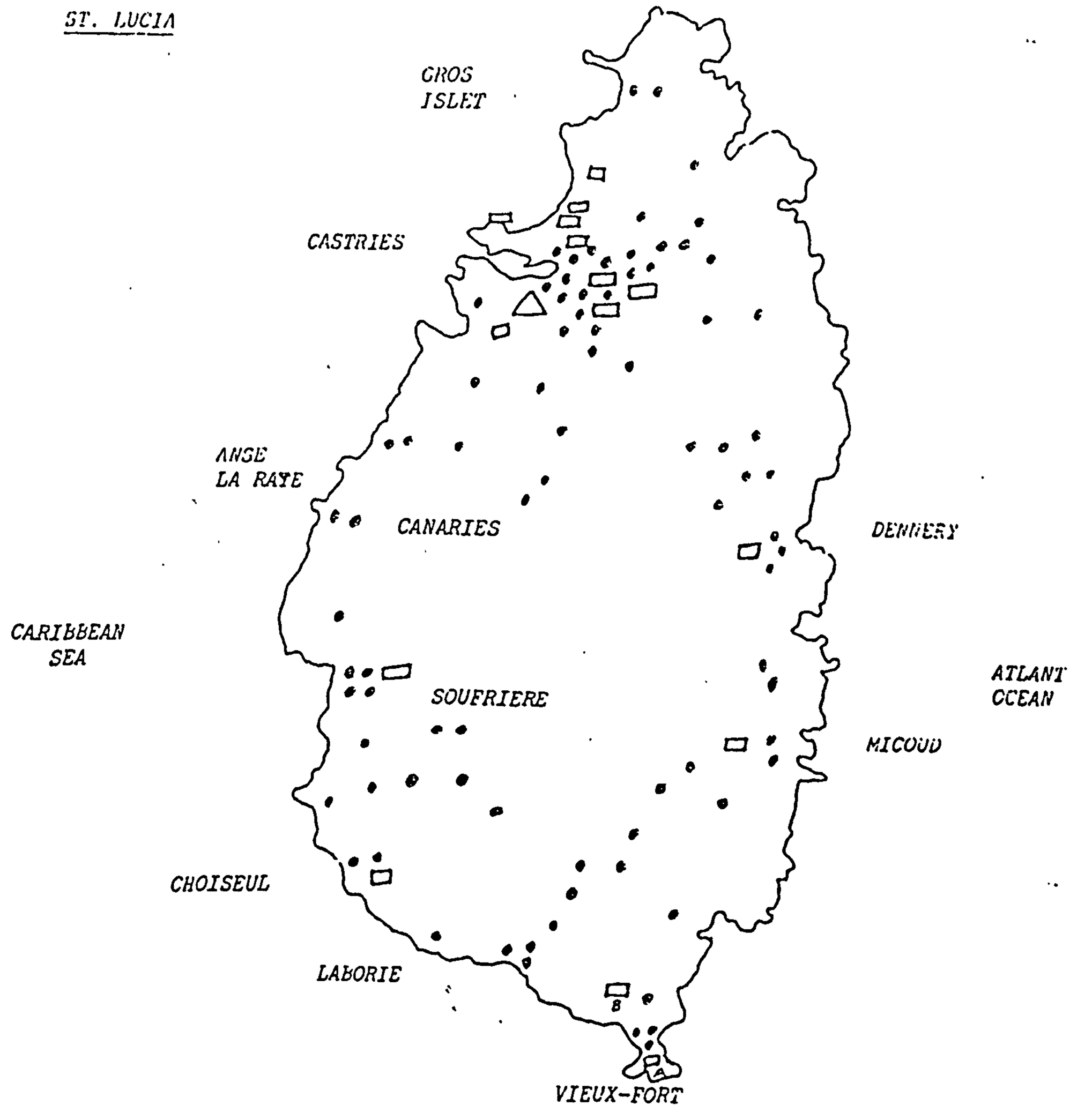
1987 – 1990

Age Group	1987			1988 R			1989			1990 P		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 – 4	11,096	10,643	21,739	11,320	10,858	22,178	11,552	11,080	22,632	11,794	11,312	23,106
5 – 9	10,564	10,658	21,222	10,778	10,873	21,651	10,998	11,095	22,093	11,228	11,328	22,556
10 – 14	10,199	10,101	20,300	10,404	10,305	20,709	10,617	10,515	21,132	10,839	10,736	21,575
15 – 19	9,010	8,709	17,719	9,192	8,885	18,077	9,379	9,067	18,446	9,576	9,257	18,833
20 – 24	6,509	6,482	12,991	6,640	6,613	13,253	6,776	6,749	13,525	6,918	6,890	13,808
25 – 29	4,318	4,454	8,772	4,405	4,543	8,948	4,495	4,636	9,131	4,590	4,734	9,324
30 – 34	2,978	3,517	6,495	3,038	3,587	6,625	3,100	3,660	6,760	3,165	3,737	6,802
35 – 39	2,349	2,762	5,111	2,397	2,817	5,214	2,446	2,875	5,321	2,497	2,935	5,432
40 – 44	2,045	2,476	4,521	2,086	2,526	4,612	2,129	2,577	4,706	2,174	2,631	4,805
45 – 49	1,886	2,388	4,274	1,924	2,436	4,360	1,964	2,486	4,450	2,005	2,538	4,543
50 – 54	1,782	2,315	4,097	1,819	2,361	4,180	1,856	2,410	4,266	1,895	2,460	4,355
55 – 59	1,672	2,051	3,723	1,706	2,092	3,798	1,741	2,135	3,876	1,777	2,180	3,957
60 – 64	1,513	1,824	3,337	1,544	1,861	3,405	1,575	1,899	3,474	1,608	1,939	3,547
65 – 69	1,244	1,575	2,819	1,269	1,607	2,876	1,295	1,639	2,934	1,322	1,674	2,996
70 – 74	877	1,282	2,159	895	1,308	2,203	913	1,334	2,247	933	1,362	2,295
75 – 79	573	981	1,554	585	1,001	1,586	597	1,022	1,619	610	1,043	1,653
80 – 84	332	666	998	338	680	1,018	345	694	1,039	352	708	1,060
85 and over	145	366	511	148	374	522	151	381	532	154	389	543
TOTAL	69,092	73,250	142,342	70,488	74,727	145,215	71,929	76,254	148,183	73,437	77,853	151,290

Source : Government Statistical Department

Appendix 22

Public Schools



KEY TO PUBLIC SCHOOLS
ST. LUCIA - 1982

PRIMARY SCHOOLS ---------- •

SECONDARY SCHOOLS ---------- □

SIR ARTHUR LEWIS COMMUNITY COLLEGE --------- △